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In Memoriam

SUZANNE SCOTCHMER
1950–2014

FOREWORD

Robin Kuntz[†] & Julie Kent^{††}

The Annual Review is a yearly publication of the *Berkeley Technology Law Journal* that provides a summary of many of the major developments at the intersection of law and technology. Our aim is to provide a valuable resource for judges, policymakers, practitioners, students, and scholars. Each Note provides a primer on a particular area of law, a development in that area of law, and commentary on that development.

The eighteen Notes in this issue continue a tradition of covering a wide range of topics. The Notes address developments in traditional intellectual property areas—patent, copyright, and trademark law—along with developments in cyberlaw and privacy. Following the Notes in each area of law, we have included a Survey of Additional IP and Technology Law Developments, which contains brief descriptions of important cases that were not addressed in the Notes.

I. PATENT LAW

Our first Note¹ in the Patent Law section examines the Supreme Court's recent decision in *Association for Molecular Pathology v. Myriad Genetics, Inc.*,² which invalidated some DNA patents. It reviews the product of nature doctrine as applied to purified and isolated biologically active molecules. It argues that the decision likely will have little judicial impact outside the patent eligibility of DNA molecules because of the Court's emphasis on DNA as an information carrier and the superficiality of the Court's scientific and legal

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† Senior *Annual Review* Editor, Berkeley Technology Law Journal; J.D., 2014, University of California, Berkeley, School of Law.

†† Senior *Annual Review* Editor, Berkeley Technology Law Journal; J.D., 2014, University of California, Berkeley, School of Law.

1. Tup Ingram, Note, *Association for Molecular Pathology v. Myriad Genetics, Inc.: The Product of Nature Doctrine Revisited*, 29 BERKELEY TECH. L.J. 385 (2014).

2. *Ass'n for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S. Ct. 2107 (2013).

analyses as applied to the claimed molecules and the product of nature doctrine.

The second Note³ examines contractual issues and judicial determinations of reasonable and nondiscriminatory (“RAND”) rates in standard essential patent (“SEP”) litigation through the context of *Microsoft Corp. v. Motorola, Inc.*⁴

The third Note⁵ explores how, in the wake of *Bowman v. Monsanto Co.*,⁶ certain uses of patented inventions, even if they are expected and ordinary, are now inexhaustible, regardless of whether the consumer licenses directly with the patentee or is a downstream purchaser. Although the Court may have created an inexhaustible right to exclude reproduction or an inexhaustible right to exclude certain uses, the Supreme Court should have created an inexhaustible right to exclude exploitation. The distinction between exploitation and making or using better balances the policy concerns underlying the patent exhaustion doctrine with the protection of Monsanto’s patent rights and the property rights of end users.

The fourth Note⁷ evaluates the legal landscape for reverse payment settlements following the Supreme Court’s ruling in *Federal Trade Commission v. Actavis, Inc.*⁸ In this decision, the Court held that under the Hatch-Waxman Act, courts should evaluate reverse payment settlements under a modified antitrust rule-of-reason standard, as parties may have antitrust liability if the payments are designed to delay competition between a brand-name and a generic pharmaceutical manufacturer. The Note concludes that districts courts applying *Actavis* will face significant challenges in applying the decision consistently and that the FTC and Congress may attempt to significantly influence the application of the decision.

3. Kassandra Maldonado, Note, *Breaching RAND and Reaching for Reasonable: Microsoft v. Motorola and Standard-Essential Patent Litigation*, 29 BERKELEY TECH. L.J. 419 (2014).

4. *Microsoft Corp. v. Motorola, Inc.*, No. C10-1823JLR, 2013 WL 5373179 (W.D. Wash. Sept. 24, 2013); *Microsoft Corp. v. Motorola, Inc.*, No. C10-1823JLR, 2013 WL 2111217 (W.D. Wash. Apr. 25, 2013); *Microsoft Corp. v. Motorola, Inc.*, 871 F. Supp. 2d 1089 (W.D. Wash. 2012), *aff’d*, 696 F.3d 872 (9th Cir. 2012); *Microsoft Corp. v. Motorola, Inc.* 854 F. Supp. 2d 993 (W.D. Wash. 2012).

5. Tabetta Marie Peavey, Note, *Bowman v. Monsanto: Bowman, the Producer and the End User*, 29 BERKELEY TECH. L.J. 465 (2014).

6. *Bowman v. Monsanto Co.*, 133 S. Ct. 1761 (2013).

7. Allison A. Schmitt, Note, *Competition Ahead? The Legal Landscape for Reverse Payment Settlements After Federal Trade Commission v. Actavis, Inc.*, 29 BERKELEY TECH. L.J. 493 (2014).

8. *FTC v. Actavis, Inc.*, 133 S. Ct. 2223 (2013).

The fifth Note⁹ discusses the new joinder provision of the America Invents Act (“AIA”), Section 299,¹⁰ which substantially restricts the ability of a patent holder to sue multiple unrelated defendants in the same proceeding. Relying on post-AIA case statistics, this Note contends that § 299 has achieved a mixed result, accomplishing some measures of success but meanwhile creating unintended consequences.

The sixth Note¹¹ reviews and summarizes the post-grant patent validity challenges created by the AIA. Additionally, this Note analyzes the first sixteen months of *inter partes* and covered business method review (“CBMR”) decisions by the Patent Trial and Appeal Board.

The seventh Note¹² examines how recent Federal Circuit decisions addressing the conflict between the Entire Market Value Rule (“EMVR”) and apportionment, coupled with the advent of innovative approaches to calculating damages, have changed the landscape of reasonable royalties in multi-component patent cases. In addition to documenting these developments, this Note summarizes the tools that courts have at their disposal when calculating reasonable royalties.

II. COPYRIGHT LAW

The first Note¹³ in the Copyright Law section contemplates the ramifications of the purported expansion of fair use in the Second Circuit’s opinion in *Cariou v. Prince*¹⁴ by examining historical interpretations of the “transformation” doctrine in the fine arts context. The author suggests that judicial analysis of transformation is too closely intertwined with perceived physical alteration at the expense of postmodern understandings of contextual presentation and audience participation. The Note proposes that market valuation can often indicate the transformative nature of a work, allowing for a fair use analysis that better implicates the constitutional purpose of the copyright regime.

9. Dongbiao Shen, Note, *Misjoinder or Mishap? The Consequences of the AIA Joinder Provision*, 29 BERKELEY TECH. L.J. 545 (2014).

10. 35 U.S.C. § 299 (2012).

11. Jonathan Tamimi, Note, *Breaking Bad Patents: The Formula for Quick, Inexpensive Resolution of Patent Validity*, 29 BERKELEY TECH. L.J. 587 (2014).

12. Zelin Yang, Note, *Damaging Royalties: An Overview of Reasonable Royalty Damages*, 29 BERKELEY TECH. L.J. 647 (2014).

13. Jonathan Francis, Note, *On Appropriation: Cariou v. Prince and Measuring Contextual Transformation in Fair Use*, 29 BERKELEY TECH. L.J. 681 (2014).

14. *Cariou v. Prince*, 714 F.3d 694 (2d Cir.), *cert. denied*, 134 S. Ct 618 (2013).

The second Note¹⁵ explores how the Supreme Court's long-awaited decision in *Kirtsaeng v. John Wiley & Sons, Inc.*¹⁶ ushered a regime of international exhaustion into U.S. copyright law, holding that application of the first sale doctrine does not turn on whether goods were manufactured in the United States or abroad. However, as right holders seek new ways to implement geographic price discrimination and copyright law continues its uneasy transition into the digital age, the first sale doctrine remains significantly under threat.

The third Note¹⁷ recounts the five rulemakings that have been conducted since the passage of the Digital Millennium Copyright Act in 1998, which tasked the Copyright Office with conducting a triennial rulemaking to grant exemptions to a ban on circumventing access controls on copyrighted works.¹⁸ Drawing on a decade of experience with the rulemaking process, this Note explores lessons learned from the most recent round and suggests practices the Copyright Office could adopt to make the rulemaking more efficient and more closely aligned with Congress's intent.

The fourth Note¹⁹ examines how *Associated Press v. Meltwater U.S. Holdings Inc.*,²⁰ an opinion addressing the boundaries of fair use in the news aggregation context, is also connected to broader issues of monetizing print media in the Internet Age, as well as new licensing regimes in the news industry. This Note discusses the extent to which courts consider licensing customs in a fair use analysis, and it concludes that in an emerging licensing market tied to novel technology, the fine line between a court's enforcement of an existing custom or creation of a new custom may make fair use a poor fit for important policy decisions.

15. S. Zubin Gautam, Note, *The Murky Waters of First Sale: Price Discrimination and Downstream Control in the Wake of Kirtsaeng v. John Wiley & Sons, Inc.*, 29 BERKELEY TECH. L.J. 717 (2014).

16. *Kirtsaeng v. John Wiley & Sons, Inc.*, 133 S. Ct. 1351 (2013).

17. Mark Gray, Note, *New Rules for a New Decade: Improving the Copyright Office's Anti-Circumvention Rulemakings*, 29 BERKELEY TECH. L.J. 759 (2014).

18. 17 U.S.C. § 1201(a)(1)(B)–(C) (2012).

19. Rosalind Jane Schonwald, Note, *Associated Press v. Meltwater US Holdings, Inc.: Fair Use, a Changing News Industry, and the Influence of Judicial Discretion and Custom*, 29 BERKELEY TECH. L.J. 799 (2014).

20. *Associated Press v. Meltwater U.S. Holdings, Inc.*, 931 F. Supp. 2d 537 (S.D.N.Y. 2013).

III. TRADEMARK LAW

The first Note²¹ in the Trademark Law section discusses the Supreme Court's decision in *Already, LLC v. Nike, Inc.*²² and examines the general ramifications of a covenant not to sue on alleged infringers and trademark holders. It also analyzes the ways in which Nike's offensive strategy has affected the intellectual property litigation field more broadly.

The second Note²³ discusses a new program, launched in October 2013 by the Internet Corporation of Assigned Names and Numbers ("ICANN"), that intends to establish thousands of new generic top-level domains ("gTLDs"). Many critics of ICANN's current model view the new gTLDs as solutions to the anticompetitive atmosphere of the existing domain name system; however, it is unlikely that more gTLDs will alleviate concerns.

IV. CYBERLAW

The first Note²⁴ in the Cyberlaw section discusses the current legal regimes surrounding data scraping online. Although these doctrines can be used to protect data, the Note highlights situations in which businesses can benefit from working with, instead of against, scrapers.

The second Note²⁵ explores the rise of revenge porn, as well as the civil and criminal strategies that scholars and legislators have offered to address it. The Note argues that these suggested approaches needlessly complicate the law, and it concludes that the existing tort of intentional infliction of emotional distress is already well-suited for revenge porn cases.

V. PRIVACY LAW

The first Note²⁶ in the Privacy Law section explains how law enforcement's use of historic cell site location information has increased enormously due to innovation in technology and a permissive legal

21. Misa K. Eiritz, Note, *Should Intellectual Property Owners Just Do It? An Examination into the Effects of Nike's Covenant Not to Sue*, 29 BERKELEY TECH. L.J. 837 (2014).

22. *Already, LLC v. Nike, Inc.*, 133 S. Ct. 721 (2013).

23. Daniela Michele Spencer, Note, *Much Ado About Nothing: ICANN's New GTLDs*, 29 BERKELEY TECH. L.J. 865 (2014).

24. Jeffrey Kenneth Hirschey, Note, *Symbiotic Relationships: Pragmatic Acceptance of Data Scraping*, 29 BERKELEY TECH. L.J. 897 (2014).

25. Jenna K. Stokes, Note, *The Indecent Internet: Resisting Unwarranted Internet Exceptionalism in Combating Revenge Porn*, 29 BERKELEY TECH. L.J. 929 (2014).

26. Mark Daniel Langer, Note, *Rebuilding Bridges: Addressing the Problems of Historic Cell Site Location Information*, 29 BERKELEY TECH. L.J. 955 (2014).

framework. Although many argue for reform, any reform should focus not only on regulations, but also on rebuilding the relationships between government agents, businesses, and individual consumers.

The second Note²⁷ discusses the recent disclosures by former government contractor Edward Snowden, which revealed a National Security Agency (“NSA”) surveillance program that stores and analyzes records from every American phone call. This Note argues that the NSA program is constitutional, but only because technologies of surveillance have far outpaced the evolution of privacy protections under the Fourth Amendment.

The final Note²⁸ in this section considers the appropriateness of current jurisprudence applying Article III’s injury-in-fact standing requirement to constitutional and statutory privacy causes of action. It concludes that requiring a separate showing of injury-in-fact for these cases undercuts the goals of Article III standing; courts should instead consider violations of the underlying privacy cause of action to be sufficient injuries-in-fact to grant Article III standing.

27. Joseph D. Mornin, Note, *NSA Metadata Collection and the Fourth Amendment*, 29 BERKELEY TECH. L.J. 985 (2014).

28. Lexi Rubow, Note, *Standing in the Way of Privacy Protections: The Argument for a Relaxed Article III Standing Requirement for Constitutional and Statutory Causes of Action*, 29 BERKELEY TECH. L.J. 1007 (2014).

**BERKELEY TECHNOLOGY LAW JOURNAL
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PATENT LAW

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ASSOCIATION FOR MOLECULAR PATHOLOGY V. MYRIAD GENETICS, INC.: THE PRODUCT OF NATURE DOCTRINE REVISITED

Tup Ingram[†]

In a highly anticipated decision that overturned two decades of U.S. Patent and Trademark Office (“USPTO”) practice,¹ called into question a century of lower court precedent,² and may have invalidated claims in up to forty thousand patents covering more than twenty percent of the human genome,³ the Supreme Court in *Association for Molecular Pathologists v. Myriad Genetics, Inc.* examined one certified question: “[a]re human genes patentable?”⁴ The Court answered: sometimes.⁵ In *Myriad*, the Supreme Court unanimously held that “genes and the information they encode are not

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[†] J.D. Candidate, 2015, University of California, Berkeley, School of Law.

1. The first DNA patent issued in the United States no later than 1984 for a recombinant DNA transfer vector (plasmid) containing the Chorionic Somatomammotropin gene. U.S. Patent No. 4,447,538 (filed Feb. 5, 1982) (issued May 8, 1984); *see also* Utility Examination Guidelines, 66 Fed. Reg. 1092, 1093 (Jan. 5, 2001) (“[W]here the application [for a DNA patent] discloses a specific, substantial, and credible utility for the claimed isolated and purified gene, the isolated and purified gene composition may be patentable.”).

2. Isolated and purified natural substances, including biologically active molecules, have long been held patent-eligible. *See infra* Sections I.B, I.C.

3. *See* Eric J. Rogers, *Can You Patent Genes? Yes and No*, 93 J. PAT. & TRADEMARK OFF. SOC’Y 19, 19 (2011) (citing NAT’L ACAD. OF SCI., REAPING THE BENEFITS OF GENOMIC AND PROTEOMIC RESEARCH: INTELLECTUAL PROPERTY RIGHTS, INNOVATION, AND PUBLIC HEALTH (2006); Kyle Jensen & Fiona Murray, *Intellectual Property Landscape of the Human Genome*, SCI., Oct. 2005, at 239).

4. Order Granting Petition for Writ of Certiorari, *Ass’n for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S. Ct. 694, 694–95 (2012) (mem) (limiting review to this one question out of the three advanced). *See also* Petition for Writ of Certiorari, *Ass’n for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S. Ct. 2107 (2013) (No. 12-398), 2012 WL 4502947, at *i.

5. *Ass’n for Molecular Pathology v. Myriad Genetics, Inc. (Myriad IV)*, 133 S. Ct. 2107 (2013). The Court examined patents written on two types of DNA; isolated genomic DNA (“gDNA”) and isolated complementary DNA (“cDNA”). gDNA is synthesized from a template that consists of extracted portions of chromosomal DNA, while cDNA is synthesized from an RNA template. *See* Section III.C, *infra*, for a more complete discussion of these two types of DNA. The Court held that isolated gDNA is not patent-eligible and that some isolated cDNA is patent-eligible. *Myriad IV*, 133 S. Ct. at 2111.

patent eligible under 35 U.S.C. § 101 simply because they have been isolated from the surrounding genetic material.”⁶ The Court invalidated Myriad’s patents on isolated genomic human DNA (“gDNA”) because “a naturally occurring DNA segment is a product of nature,”⁷ but it upheld some of its claims directed toward complementary DNA (“cDNA”) molecules, determining that synthesizing these molecules “unquestionably creates something new.”⁸

Within an hour of the decision’s release, the American Civil Liberties Union (“ACLU”), which had filed the suit for declaratory judgment on behalf of twenty interested parties, declared: “VICTORY! Supreme Court Decides: Our Genes Belong to Us, Not Companies.”⁹ By the end of the day, three competing genetic testing companies announced that they would offer testing for mutations in the BRCA1 and BRCA2 genes, synthetic analogues with structures that had been covered by Myriad’s invalidated claims.¹⁰ Within a month, Myriad had sued two competitors for willful infringement of thirty-five claims found in ten patents on BRCA testing.¹¹ At the time of this writing, Myriad is currently embroiled in a multidistrict litigation (“MDL”) arising from five original actions, which could determine the validity of claims in fourteen of its DNA patents.¹² So far, the Court’s long-

6. *Myriad IV*, 133 S. Ct. at 2120.

7. *Id.* at 2111.

8. *Id.* at 2119. As discussed in Sections III.C and IV.C and Part V, *infra*, the bright line that the Court appears to have drawn between gDNA and cDNA is not very clear.

9. Sandra S. Park, *VICTORY! Supreme Court Decides: Our Genes Belong to Us, Not Companies*, ACLU BLOG OF RIGHTS (June 13, 2013, 11:35 AM), <https://www.aclu.org/blog/womens-rights-free-speech-technology-and-liberty/victory-supreme-court-decides-our-genes-belong>.

10. The three companies were Ambry Genetics, Gene-By-Gene, Inc., and GeneDx, Ltd. See Press Release, Ambry Genetics, Ambry Genetics Launches BRCA 1 & 2: Single Genes and NGS Panel Offering (June 13, 2013), *available at* <http://www.ambrygen.com/press-releases/ambry-genetics-launches-brca-1-2-single-genes-and-ngs-panel-offerings>; Press Release, Bio-Reference Labs, GeneDx to Launch Comprehensive Breast Cancer Genetic Test (June 13, 2013), <http://www.prnewswire.com/news-releases/genedx-to-launch-comprehensive-breast-cancer-genetic-test-211407911.html>; Press Release, Gene By Gene, Supreme Court Ruling Today Allows DNATraits to Offer Low Cost BRCA Breast and Ovarian Cancer Gene Testing in U.S., (June 13, 2013), <http://www.prnewswire.com/news-releases/supreme-court-ruling-today-allows-dnatraits-to-offer-low-cost-brca-breast-and-ovarian-cancer-gene-testing-in-us-211426171.html>.

11. *Univ. of Utah Research Found. v. Ambry Genetics Corp.*, No. 2:13-cv-00640-RJS (D. Utah filed July 9, 2013); *Univ. of Utah Research Found. v. Gene by Gene Ltd.*, No. 2:13-cv-00643-EJF (D. Utah filed July 10, 2013).

12. See *infra* Section IV.A.

awaited pronouncement regarding the patent eligibility of DNA seems to have generated more uncertainty and litigation than it resolved.¹³

The apparent uncertainty arising from the Court's latest foray into § 101 jurisprudence is not surprising, given the lack of a consensus even at the Federal Circuit regarding § 101's role in the adjudication of patent validity. The Federal Circuit's "opinions spend page after page revisiting [its] cases and those of the Supreme Court, and still [its judges] continue to disagree vigorously over what is or is not patentable subject matter."¹⁴ The Supreme Court has attempted to provide guidance regarding the resolution of these disagreements. Its *Benson*, *Flook*, and *Diehr* patent eligibility trilogy spanning 1972 to 1981 established broad guidelines regarding the patent eligibility of computer software.¹⁵ Its more recent *Bilski* and *Prometheus* decisions reiterated the patent ineligibility of abstract ideas and laws of nature.¹⁶ However, § 101 is still seen as a "vague and contentious . . . doctrine[]" that gives courts "rather thin material to work with" when fashioning holdings.¹⁷ Judges are placed in the role of "oenologists trying to describe a new wine. They have an abundance of adjectives—earthy, fruity, grassy, nutty, tart, woody, to name just a few—but picking and choosing . . . which ones apply . . . depends less on the assumed content of the words than on the taste of the tongue pronouncing them."¹⁸ This lack of clarity was recently reaffirmed in the Federal Circuit's fractured *en banc* decision in *CLS Bank International v. Alice Corp. Pty.*, which resulted in a terse per curiam ruling accompanied by five separate opinions. The outcome led Chief Judge Rader to note that, "[a]lthough a majority of the judges on the court agree that the

13. See generally Bill Malone, *Effects of Gene Patent Ruling Uncertain*, CLINICAL LABORATORY NEWS, July 2013, at 14, available at <http://www.aacc.org/publications/cln/2013/july/Pages/Gene-Patent.aspx>; Emma Barraclough, *What Myriad Means for Biotech*, WORLD INTELL. PROP. ORG. MAG., Aug. 2013, at 21, available at http://www.wipo.int/wipo_magazine/en/2013/04/article_0007.html; Am. Soc'y for Cell Biology, *The Supreme Court's Myriad Decision: Little or No Impact on Basic Research?*, ASCB POST (June 19, 2013, 12:09), <http://www.ascb.org/ascbpost/index.php/ascbpost-home/item/77-the-supreme-court-s-myriad-decision-little-or-no-impact-on-basic-research>.

14. *MySpace, Inc. v. GraphOn Corp.*, 672 F.3d 1250, 1259 (Fed. Cir. 2012) (listing a litany of Federal Circuit cases reaching inconsistent decisions).

15. See *Gottschalk v. Benson*, 409 U.S. 63 (1972); *Parker v. Flook*, 437 U.S. 584 (1978); *Diamond v. Diehr*, 450 U.S. 175 (1981).

16. See *Bilski v. Kappos*, 130 S. Ct. 3218 (2010); *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289 (2012).

17. Dennis Crouch & Robert P. Merges, *Operating Efficiently Post-Bilski by Ordering Patent Doctrine Decision-Making*, 25 BERKELEY TECH L.J. 1673, 1683, 1691 (2010).

18. *MySpace*, 672 F.3d at 1259.

method claims do not recite patent-eligible subject matter, no majority of those judges agrees as to the legal rationale for that conclusion.”¹⁹

This Note proceeds in five Parts. Part I discusses how courts have interpreted § 101 in relation to the patent eligibility of naturally occurring molecules. Part II describes the chemical properties of chromosomal and isolated DNA in light of the judicial carve outs discussed in Part I. Part III describes the procedural history of the *Myriad* case. Part IV discusses the state of *Myriad* one year after it was decided, in light of ongoing litigation and the USPTO’s reaction to the Court’s holding. Part V briefly examines a number of possibilities regarding *Myriad*’s legacy in § 101 jurisprudence.

I. PATENT ELIGIBILITY OF BIOLOGICALLY ACTIVE CHEMICALS

Section 101 of the Patent Act of 1952 defines what qualifies for patent protection: “any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof.”²⁰ Section 101’s inclusive nature “embodie[s] [Thomas] Jefferson’s philosophy that ‘ingenuity should receive a liberal encouragement.’”²¹ Despite § 101’s broad language and inclusive intent, the Supreme Court has rejected the suggestion “that § 101 has no limits or that it embraces every discovery.”²² “[L]aws of nature, natural phenomena, and abstract ideas”²³ are judicially created exceptions to patentable subject matter.²⁴ When one of these exceptions applies to a composition of matter, the composition is patent-ineligible subject matter because it is a “product of nature.”²⁵ Applying this

19. *CLS Bank Int’l v. Alice Corp. Pty.*, 717 F.3d 1269, 1292 n.1 (Fed. Cir. 2013) (Rader, C.J., concurring in part and dissenting in part), *cert. granted*, 134 S. Ct. 734 (2013).

20. 35 U.S.C. § 101 (2012). Note that this statutory language closely parallels that of the original Patent Act of 1793, which “defined statutory subject matter as ‘any new and useful art, machine, manufacture, or composition of matter, or any new or useful improvement [thereof].’” *Diamond v. Chakrabarty*, 447 U.S. 303, 308 (1980) (quoting the Patent Act of Feb. 21, 1793, § 1, 1 Stat. 319); *see also* Peter S. Menell, *Forty Years of Wondering in the Wilderness and No Closer to the Promised Land: Bilski’s Superficial Textualism and the Missed Opportunity to Return Patent Law to Its Technology Mooring*, 63 STAN. L. REV. 1289, 1294–97 (2011) (discussing the essential equivalence of the 1793 and 1952 laws’ formulations of patent-eligible subject matter). The 1952 Patent act “intended to perpetuate the existing contours of patentable subject matter as . . . recognized in patent jurisprudence.” *Id.* at 1302.

21. *Chakrabarty*, 447 U.S. at 308.

22. *Id.* at 309; *see also MySpace*, 672 F.3d at 1260, 1261 (referring to § 101 as a “coarse filter” through which a “swamp of verbiage” leads to a “murky morass”).

23. *Diamond v. Diehr*, 450 U.S. 175, 185 (1981).

24. *See id.*

25. *See infra* Section I.A.

doctrine to Myriad's patents on isolated DNA, the *Myriad* Court invalidated Myriad's composition claims to gDNA, holding that "a naturally occurring DNA segment is a product of nature and not patent eligible merely because it has been isolated."²⁶

A. THE PRODUCT OF NATURE EXCEPTION TO PATENT ELIGIBILITY

The product of nature doctrine generally states that naturally occurring products are not patent eligible. However, the "underlying difficulty . . . deals with defining what precisely constitutes a product of nature. The line [between products of nature and inventions of 'human ingenuity'] is extremely difficult to draw."²⁷ Courts are torn between two conflicting intuitions. Patent eligibility is constrained because "[p]henomena of nature, . . . mental processes, and abstract intellectual concepts . . . are the basic tools of scientific and technological work."²⁸ However, "too broad an interpretation of this exclusionary principle could eviscerate patent law. For all inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas."²⁹

The product of nature doctrine was first expressed in *Ex parte Latimer*.³⁰ Latimer applied for a patent on "the fiber . . . consisting of the cellular tissues

26. *Ass'n for Molecular Pathology v. Myriad Genetics, Inc. (Myriad IV)*, 133 S. Ct. 2107, 2111 (2013).

27. Richard Seth Gipstein, *The Isolation and Purification Exception to the General Unpatentability of Products of Nature*, COLUMBIA SCI. & TECH. LAW REVIEW (Jan. 15, 2003), <http://www.stlr.org/html/volume4/gipstein.pdf>, at 8.

28. *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972).

29. *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1293 (2012). This tension has led some to observe that the product of nature doctrine has been applied in an "inconsistent and unclear" manner by courts, which have "cobbled [it] together from dicta." See Samantak Ghosh, Note, *Gene Patents: Balancing the Myriad Issues Concerning the Patenting of Natural Products*, 27 BERKELEY TECH. L.J. 241, 246 ("[T]he application of the judicial doctrine has been inconsistent and unclear."); Dan Burk, *The "Runcible" Product of Nature Doctrine*, SCOTUSBLOG (Feb. 4, 2013, 3:50 PM), <http://www.scotusblog.com/2013/02/the-runcible-product-of-nature-doctrine> ("That three judges with vast experience in patent law could find no distinct provenance for the 'product of nature' doctrine separate from the other patentability criteria of Title 35 should come as no surprise, given that the doctrine has been cobbled together from dicta in older cases decided before the current patent statute was codified in 1952."); see also Can Cui, *Patent Eligibility of Molecules: "Product of Nature" Doctrine After Myriad*, 2 N.Y.U. J. INTELL. PROP. & ENT. L. LEDGER 73 (2011) (summarizing the product of nature doctrine as applied to molecules and chemical elements).

30. *Ex parte Latimer*, 1889 Dec. Comm'r Pat. 123. For excellent discussions of the origins of the product of nature doctrine and explanations of why *Latimer* and not *American Wood-Paper Co. v. Fibre Disintegrating Co.*, 90 U.S. 566 (1874), or *Cochrane v. Badische Anilin & Soda Fabrik*, 111 U.S. 293 (1884), was the first case in this line, see, e.g., Christopher Beauchamp, *Patenting Nature: A Problem of History*, 16 STANFORD TECH. L. REV. 257, 271–74

of the *Pinus australis* [tree].”³¹ In language that the Court echoes in *Myriad*, the Commissioner recognized that Latimer had developed a “process which enables him to procure the fiber in its natural free state.”³² The Commissioner found that Latimer’s fiber, so procured, “differ[s] [from other cellulose fibers] in characteristics as to length, strength, and fineness”³³ However, the Commissioner held that “these differences are not at all due to the processes by which they are removed from the [plant] . . . but to the process of nature in developing and growing them.”³⁴ Ultimately, Latimer’s fiber could not be patented because “the pure fiber . . . is essentially the same thing and possesses the same construction” as when it was found in “the natural matrix of the leaf or stalk or wood in which nature form[ed] and develop[ed] it.”³⁵

The Commissioner concluded that although Latimer’s “alleged invention is unquestionably very valuable,”³⁶ it nonetheless was “a natural product and can no more be the subject of a patent in its natural state when freed from its surroundings than wheat which has been cut by a reaper.”³⁷ Having seen value in Latimer’s discovery, the Commissioner recited some further steps that the putative inventor might have taken in order to obtain a patent: “If applicant’s process had another final step by which the fiber . . . were

(2013); John M. Conley & Roberte Makowski, *Back to the Future: Rethinking the Product of Nature Doctrine as a Barrier to Biotechnology Patents (Part I)*, 85 J. PAT. & TRADEMARK OFF. SOC’Y 301, 319–330 (2003); Leslie A. Demers, *Product of Nature Doctrine: Myriad’s Effect Beyond Nucleic Acids 3–4* (May 1, 2013) (unpublished manuscript), available at <http://ssrn.com/abstract=2279754>. Note that the patent examiner’s initial rejection of the patent application at issue in *Latimer* referenced both *American Wood-Paper* and *Cochrane*. See *Latimer*, 1889 Dec. Comm’r Pat. at 124.

31. *Latimer*, 1889 Dec. Comm’r Pat. at 123.

32. *Id.* at 126. See, e.g., *Ass’n for Molecular Pathology v. Myriad Genetics, Inc. (Myriad IV)*, 133 S. Ct. 2107, 2111 (2013) (“[A] naturally occurring DNA segment is a product of nature and not patent eligible merely because it has been isolated.”); *id.* at 2113 (“Myriad’s patents would . . . if valid, give it the exclusive right to isolate . . . genes . . . by breaking the covalent bonds that connect the DNA to the rest of the . . . genome.”); *id.* at 2114 (“The central dispute among the [Federal Circuit] panel members was whether the act of *isolating* DNA . . . is an inventive act.”); *id.* at 2117 (“Nor are Myriad’s claims saved by the fact that isolating DNA from the human genome severs chemical bonds and thereby creates a nonnaturally occurring molecule.”) *But see id.* at 2118 (“Myriad’s claims [do not] rely in any way on the chemical changes that result from the isolation of a particular section of DNA [but rather] focus on . . . genetic information.”), 2119 (“[T]here are no method claims before this Court. . . . [T]he processes used by Myriad to isolate DNA were well understood by geneticists.”).

33. *Latimer*, 1889 Dec. Comm’r Pat. at 125.

34. *Id.*

35. *Id.*

36. *Id.* at 127.

37. *Id.*

changed, . . . [it would probably be patentable] . . . because the natural fiber . . . would . . . become something new and different from what it is in its natural state.”³⁸ Although *Latimer* held that the “alleged invention” was patent ineligible, this portion of the opinion suggests that even a minor transformation of a natural product might have rendered it patentable.³⁹ As discussed in Section I.B., isolating and purifying natural products is an example of a transformation that courts frequently deemed adequate to impart patent eligibility on otherwise ineligible natural products.

B. THE “PURIFIED AND ISOLATED” EXCEPTION TO THE PRODUCT OF NATURE DOCTRINE

For over a century, purified and isolated natural substances were deemed patent eligible “if the act of isolation render[s] [the substance] greatly more useful than the product in its natural state.”⁴⁰ In 1910, the Seventh Circuit upheld a patent covering “substantially pure” aspirin, acetylsalicylic acid in *Kuehmsted v. Farbenfabriken of Elberfeld Co.*⁴¹ Comparing the patented substance to another, previously disclosed yet less pure substance, the court held that, even “assuming that the compounds, chemically, are not different—that the two bodies are analytically the same,”⁴² substantially pure aspirin was patent eligible because “two substances, having the same chemical formula, may differ widely, as to impurities, upon qualitative analysis.”⁴³ Purified and isolated aspirin was patent eligible because it was “therapeutically different” from the impure form.⁴⁴

This line of reasoning informed Judge Learned Hand’s influential opinion in *Parke-Davis & Co. v. H.K. Mulford Co.*⁴⁵ Judge Hand upheld the patentability of purified adrenaline because it was “a new thing commercially and

38. *Id.*

39. *Id.*

40. Beauchamp, *supra* note 30, at 276. The earliest cases concerned what now would fall under § 102’s novelty requirement. *Id.* at 277–80 (discussing early cases in which the idea of novelty figured prominently).

41. *Kuehmsted v. Farbenfabriken of Elberfeld Co.*, 179 F. 701, 702, 704 (7th Cir. 1910). Aspirin is a derivative of salicylic acid, which itself was known to Hippocrates and is found naturally in willow bark. See *What is Aspirin? 100 Years of Aspirin*, ASPIRIN FOUND., <http://www.aspirin-foundation.com/what/100.html> (last visited Apr. 9, 2014).

42. *Kuehmsted*, 179 F. at 704.

43. *Id.* at 703–04.

44. *Id.* at 704.

45. *Parke-Davis & Co. v. H.K. Mulford Co.*, 189 F. 95 (S.D.N.Y. 1911), *aff’d in part, rev’d in part* 196 F. 496 (2d Cir. 1912) (“Upon all the main fundamental questions we fully concur in Judge Hand’s reasoning and conclusions.”).

therapeutically” when compared with the naturally occurring salt form.⁴⁶ The purified chemical possessed new properties, which constituted a “distinction not in degree, but in kind” from adrenaline as found in nature.⁴⁷ Judge Hand then stated that, “even if [adrenaline] were merely an extracted product without change, there is no rule that such products are not patentable.”⁴⁸ The Court of Customs and Patent Appeals echoed this reasoning in *In re Merz*: “Th[e] general rule [that natural products cannot be patented] is a well-settled one, but like all other rules it has an exception. The exception is that if the process produces an article of such purity that it differs not only in degree but in kind it may be patentable.”⁴⁹

In *Funk Brothers Seed Co. v. Kalo Inoculant Co.*,⁵⁰ the Supreme Court addressed the patent eligibility of a composition of matter and held that a mixture of naturally occurring bacterial strains was patent ineligible because the mixture merely exhibited a law of nature. By combining three strains of mutually inhibitory bacteria in specific ratios, the patentee had produced a hitherto unknown combination that had useful properties in commercial agriculture. However, the Court held that the patentee had not “create[d] a state of inhibition or of noninhibition in the bacteria. Their qualities are the work of nature . . . [and thus] of course [were] not patentable.”⁵¹ The Court recognized the commercial benefits but held that the “aggregation of species fell short of invention within the meaning of the patent statutes,” since “[t]he qualities of these bacteria, like the heat of the sun, . . . are manifestations of laws of nature, free to all men and reserved exclusively to none.”⁵²

The *Funk Brothers* inoculant was determined to be patent ineligible as a law of nature, rather than as a natural product, and the Court only addressed a mixture of natural bacteria, rather than a purified natural product. Accordingly, in the first § 101 case after the 1952 Patent Act, the Fourth

46. *Id.* at 103, 115.

47. *Id.* at 103.

48. *Id.*

49. *In re Merz*, 97 F.2d 599, 600–01 (C.C.P.A. 1938) (invalidating a patent on naturally occurring ultramarine because the claimed product was “the same old ultramarine with the same old use”). Jurisprudence on the product of nature doctrine has been inconsistent and plagued with the recurrent conflation of subject matter eligibility, novelty, and nonobviousness issues. *See, e.g., In re Williams*, 171 F.2d 319 (C.C.P.A. 1948) (upholding a patent on the naturally occurring laevorotatory form of a lactone); *In re King*, 107 F.2d 618, 619–20 (C.C.P.A. 1939) (upholding a patent on Vitamin C); *Ex parte Berkman & Berkman*, 90 U.S.P.Q. 398, 400 (Pat. Off. Bd. of Appeals 1951) (invalidating patents on chlorophyll-containing extracts).

50. 333 U.S. 127 (1948).

51. *Id.* at 130.

52. *Id.* at 127, 130.

Circuit was not strictly bound by the *Funk Brothers* holding when it upheld a patent on purified Vitamin B12.⁵³ In *Merck & Co. v. Olin Mathieson Chemical Corp.*, the court held that “[t]here is nothing in the language of the [Patent] Act which precludes the issuance of a patent upon a ‘product of nature’ when it is a ‘new and useful composition of matter.’”⁵⁴ The court held that the purified product, which was “identical in chemical structure and function” to the natural product, nevertheless was “not the same as the old [composition of nature], but [was a] new and useful composition . . . entitled to the protection of the patent.”⁵⁵

The Court of Customs and Patent Appeals echoed this line of thought in *In re Bergstrom*,⁵⁶ where it reversed the Patent Office’s refusal to patent Prostaglandin E2 (“PGE₂”) and Prostaglandin E3 (“PGE₃”).⁵⁷ The Patent Office had reasoned that “inasmuch as the ‘claimed compounds are naturally occurring’ . . . they therefore ‘are not ‘new’ within the connotation of the patent statute.”⁵⁸ The court reversed the Patent Office’s application rejection, clarifying that “what appellants claim—pure PGE₂ and PGE₃—is not ‘naturally occurring.’”⁵⁹

Prior to the biotechnology revolution of the late twentieth century, a large body of law had established an inconsistently applied exception to the patent ineligibility of products of nature. But until *Myriad*, no appellate court had ever invalidated a claim covering a molecule, including a DNA molecule, under the product of nature doctrine.⁶⁰

53. *Merck & Co. v. Olin Mathieson Chem. Corp.*, 253 F.2d 156 (4th Cir. 1958).

54. *Id.* at 161. The *Merck* court held the purified natural product to be patent eligible because, prior to the patent, B12 had been “unidentified and unknown” and because the natural product was “not known to contain the desired activity in even the slightest degree.” *Id.* at 163. Vitamin B12 treated pernicious anemia. The *Merck* court recognized the product’s “great therapeutic and commercial worth” as a factor to be considered in determining its patent eligibility. *See id.* at 164. For an interesting discussion of the influence of *Parke-Davis* on *Merck* and on twentieth-century adjudication of the product of nature doctrine, see Beauchamp, *supra* note 30, at 303–06.

55. *Merck*, 253 F.2d at 160, 161.

56. 427 F.2d 1394, 1397 (C.C.P.A. 1970).

57. Prostaglandin E2 and E3, naturally occurring hormones, are produced in the body and mediate a number of physiological effects. Clinically, PGE₂ induces labor, and PGE₃ inhibits tumor cell proliferation. *See, e.g.*, W.F. O’Brien, *The Role of Prostaglandins in Labor and Delivery*, 22 CLINICS IN PERINATOLOGY 973, 973 (1995).

58. Application of Bergstrom, 427 F.2d 1384, 1397 (C.C.P.A. July 16, 1970) (quoting *Ex parte Snell*, 86 U.S.P.Q. 496 (1950)).

59. *Id.* at 1401 (“[The claimed] compounds, as far as the record establishes, do not exist in nature in pure form, and appellants have neither merely discovered, nor claimed sufficiently broadly to encompass, what has previously existed in fact in nature’s storehouse, albeit unknown, or what has previously been known to exist.”).

60. *See Cui, supra* note 29.

C. THE PRODUCT OF NATURE DOCTRINE AS APPLIED TO
BIOTECHNOLOGY

The biotechnology industry uses living cells to synthesize useful molecules. It manipulates naturally occurring intracellular biochemical processes to create new molecules or to modify naturally occurring molecules.⁶¹ As such, these processes and products are especially likely to implicate the product of nature doctrine when biotechnology companies seek patent protection for their inventions and discoveries. Biotechnology is one of the world's most research-intensive industries; its companies invest up to fifty percent of their revenues in research. Biotechnology companies rely heavily on strong intellectual property protection because of these high research and development costs, as well as the low expense of product imitation.⁶² Since the Supreme Court's *Diamond v. Chakrabarty* decision in 1980,⁶³ the biotechnology industry generally has received patent protection from the USPTO and courts.

In *Chakrabarty*, the Supreme Court took up § 101 patent eligibility of “compositions of matter” for the first time under the 1952 Patent Act.⁶⁴ The patentee had genetically modified a bacterium by inserting synthetic DNA into its cytoplasm.⁶⁵ The Court held this bacterium to be an invention and therefore patent eligible: “[Chakrabarty’s] micro-organism plainly qualifies as patentable subject matter. His claim is not to a hitherto unknown natural phenomenon, but to a nonnaturally occurring manufacture or composition of matter—a product of human ingenuity ‘having a distinctive name, character [and] use.’”⁶⁶ It later stated in dictum that “[h]ere, by contrast [to *Funk Brothers*], the patentee has produced a new bacterium with *markedly different* characteristics from any found in nature. . . . His discovery is not nature’s handiwork, but his own; accordingly it is patentable subject matter

61. *Biotechnology*, 6 THE COLUMBIA ENCYC. (2000).

62. Esteban Burrone, *Patents at the Core: The Biotech Business*, WORLD INTELL. PROP. ORG., http://www.wipo.int/sme/en/documents/patents_biotech_fulltext.html (last visited Apr. 3, 2014). This research expenditure compares to five percent of revenue in the chemical industry and thirteen percent in the pharmaceutical industry. *Id.*

63. *Diamond v. Chakrabarty*, 447 U.S. 303 (1980).

64. The *Chakrabarty* Court held only that living organisms were “compositions of matter” and thus comprised patent-eligible subject matter. *Id.* at 309–10.

65. The inserted DNA plasmid coded for enzymes that degrade crude oil. The transformed bacterium was useful in accelerating the natural processes by which bodies of water digest oil spills. *Id.* at 305.

66. 447 U.S. at 309–10 (quoting *Hartranft v. Wiegmann*, 121 U.S. 609, 615 (1887), a nineteenth-century tax case that used the quoted language to illuminate whether polished seashells were considered “manufactured” under the then-extant tax codes).

under § 101.”⁶⁷ The question before the *Chakrabarty* Court was whether living organisms were patent eligible, not the degree to which Chakrabarty’s bacterium differed from the naturally occurring bacterium into which the inventor had injected a plasmid.⁶⁸ The *Chakrabarty* Court did not rely on its “markedly different” characterization to establish the patent eligibility of the claimed invention, nor did it elucidate how to distinguish a “marked” difference from a mere difference.⁶⁹

Chakrabarty was the first Supreme Court § 101 case of the biotech age. It was interpreted as broadly supportive of DNA patents.⁷⁰ The USPTO’s policy of issuing gene patents since the early 1980s “rang in a period of liberal patentability based on the ‘isolation and purification’ doctrine.”⁷¹ Since then, the USPTO has issued up to “40,000 DNA-related patents, covering about 20 percent of the genes in the human genome.”⁷² It has also issued patents on isolated and purified proteins and on cell lines.⁷³

67. *Id.* at 308–10 (emphasis added).

68. *Id.* at 307. (“The question before us in this case is a narrow one of statutory interpretation requiring us to construe 35 U.S.C. § 101. . . . Specifically, we must determine whether respondent’s micro-organism constitutes a ‘manufacture’ or ‘composition of matter’ within the meaning of the statute.”).

69. Similarly, the *Myriad* Court, although apparently seeking to require a marked difference from a naturally occurring product, gives no guidance on how to make such a determination. *See infra* Section III.C, Part V. The USPTO, in contrast, does seek to provide its examiners with criteria for recognizing “significant[] differen[ces]” between such compositions. *See infra* Section IV.C.

70. “*Chakrabarty* represents . . . the patenting not only of living things but of genes as well. . . . *Chakrabarty* ushered in the genomics age.” KAREN F. GREIF & JON F. MERZ, CURRENT CONTROVERSIES IN THE BIOLOGIC SCIENCES: CASE STUDIES OF POLICY CHALLENGES FROM NEW TECHNOLOGIES 53 (2007).

71. Demers, *supra* note 30, at 8. The number of biotechnology patent applications in the United States rapidly increased after *Chakrabarty*: 18,695 applications were filed in 1996, compared to 47,473 applications in 2002. *See Gene Patents and Global Competition Issues: Protection of Biotechnology Under Patent Law*, GENETIC ENG’G & BIOTECH. NEWS (Jan. 1, 2006), <http://www.genengnews.com/keywordsandtools/print/1/11595>; *see also* Utility Examination Guidelines, 66 Fed. Reg. 1092, 1093 (Jan. 5, 2001). The USPTO regulation states:

An isolated and purified DNA molecule . . . is eligible for a patent because (1) an excised gene is eligible for a patent as a composition of matter or as an article of manufacture because that DNA molecule does not occur in that isolated form in nature, or (2) synthetic DNA preparations are eligible for patents because their purified state is different from the naturally occurring compound.

Id.

72. Rogers, *supra* note 3.

73. *See generally* Vincent J. Filliben III, *Patent Law and Regenerative Medicine: A Consideration of the Current Law and Public Policy Concerns Regarding Upstream Patents*, 9 WAKE FOREST INTELL. PROP. L.J. 239 (2009).

Appellate jurisprudence regarding the USPTO's patent eligibility practices is sparse.⁷⁴ In general, the Federal Circuit has endorsed the USPTO's policy of broad patent eligibility of DNA molecules during the last two decades. In *Amgen, Inc. v. Chugai Pharmaceutical Co.*,⁷⁵ the Federal Circuit upheld a claim directed to a "purified and isolated DNA sequence consisting essentially of a DNA sequence encoding human erythropoietin."⁷⁶ The district court had distinguished between the patentable "purified and isolated DNA sequence" and "the [naturally occurring] DNA sequence encoding human erythropoietin (EPO)," which it considered "a non-patentable natural phenomenon 'free to all men and reserved exclusively to none.'"⁷⁷ The Federal Circuit affirmed this interpretation: "[t]he subject matter of [the] claim [is] the novel purified and isolated sequence which codes for EPO."⁷⁸ In *Schering Corp. v. Amgen Inc.*,⁷⁹ the Federal Circuit upheld the district court's claim construction of a patent written on recombinant DNA molecules, "which code on expression for a polypeptide of the [gamma Interferon] type."⁸⁰ The trial court had held that "the claim language . . . refers to [either] a naturally occurring or non-naturally occurring DNA sequence."⁸¹

For the last two decades, the USPTO had issued patents for purified and isolated DNA molecules whose sequences corresponded to naturally occurring DNA and which were identified as coding for specific naturally occurring proteins. As discussed below, the USPTO's policy and the Federal Circuit's legal interpretation were consistent with the many significant chemical differences between naturally occurring chromosomal DNA, the biological repository of genomic information, and synthetic isolated DNA, the molecules biochemists use to perform the types of genetic testing that some of Myriad's contested patents covered.

74. Neither of the two immediately following Federal Circuit cases directly addressed § 101 patent eligibility. Prior to *Myriad*, the Federal Circuit had not been called on to answer the question of DNA patents' § 101 eligibility, since the cases it saw were decided on other grounds.

75. 927 F.2d 1200 (Fed. Cir. 1991). This opinion was written by Judge Lourie, who twice voted to uphold the patent eligibility of Myriad's gDNA and cDNA claims.

76. *Id.* at 1202, 1204, 1206. Note also that § 101 eligibility was not at issue on appeal in *Chugai*.

77. *Amgen, Inc. v. Chugai Pharm. Co., Ltd.*, No. 87-2617-Y, 1989 WL 169006 (D. Mass. Dec. 11, 1989) *aff'd in part, vacated in part*, 927 F.2d 1200 (Fed. Cir. 1991) (quoting *Diamond v. Chakrabarty*, 447 U.S. 303 (1980)).

78. *Chugai*, 927 F.2d at 1206. Note that the *Chugai* court's determination turned on the question of novelty, not § 101 patent eligibility.

79. 222 F.3d 1347, 1348 (Fed. Cir. 2000). Note that, like *Chugai*, *Schering* did not present the Federal Circuit with a question of § 101 patent eligibility.

80. U.S. Patent No. 4,530,901 (filed Feb. 4, 1980).

81. *Schering Corp. v. Amgen Inc.*, 18 F. Supp. 2d 372, 400 (D. Del. 1998).

II. CHEMICAL PROPERTIES OF DNA MOLECULES

The patent eligibility of a purified and isolated molecule depends on a comparison of the molecule's structure and uses to those of the molecule as it occurs in nature. The *Myriad* Court seems to have indicated that the isolated and purified molecule must be "markedly different" from its naturally occurring homologue to be patent eligible under § 101.⁸² This Part explores some of the fundamental differences between chromosomal DNA and isolated DNA molecules, which inform how DNA exists in a natural state and what happens to that same DNA after it is manipulated in a laboratory.⁸³

A. CHROMOSOMAL DNA

Genomic DNA contains all of an organism's genetic information.⁸⁴ The human genome consists of large DNA molecules called chromosomes. Each human cell has forty-six chromosomes, which are made partially of DNA but also contain large amounts of proteins and RNA.⁸⁵ Chromosomal DNA contains genes, discrete regions that encode RNA molecules. Genes, in turn, typically consist of numerous coding sequences (exons), noncoding sequences (introns), and regulatory sequences that control gene expression. Most chromosomal DNA does not code for any specifically known protein,

82. *Ass'n for Molecular Pathology v. Myriad Genetics, Inc. (Myriad IV)*, 133 S. Ct. 2107, 2117 (2013) (citing *Diamond v. Chakrabarty*, 447 U.S. 303, 310 (1980)).

83. See *Chromosomal DNA and Its Packaging in the Chromatin Fiber*, in B. ALBERTS ET AL., *MOLECULAR BIOLOGY OF THE CELL* (4th ed. 2002). The DNA in the nucleus of a eukaryotic cell exists primarily in the form of chromosomes, which are complex structures that consist mainly of DNA, RNA, and proteins. Chromosomal DNA is the DNA within one of these complex structures. Although there are other types of naturally occurring biologically active DNA, this Part contrasts only chromosomal DNA with isolated and purified DNA because the *Myriad* Court's certified question was limited to "human genes" and because the patents in suit were written on isolated DNA.

84. Each court that ruled in the *Myriad* case provided an excellent summary of the structure of DNA and of the basic processes by which DNA is transcribed to an RNA molecule, which in turn is modified and then translated into a protein through natural biochemical mechanisms. See *Ass'n for Molecular Pathology v. U.S. Patent & Trademark Office (Myriad I)*, 702 F. Supp. 2d 181, 192–99 (S.D.N.Y. 2010); *Ass'n for Molecular Pathology v. U.S. Patent & Trademark Office (Myriad III)*, 689 F.3d 1303, 1310–13 (Fed. Cir. 2012); *Myriad IV*, 133 S. Ct. at 2111–12.

85. In fact, human chromosomes are only approximately twenty percent DNA by weight. See Norman P. Salzman, Dorothy E. Moore & John Mendelsohn, *Isolation and Characterization of Human Metaphase Chromosomes*, 56 *PROC. NAT'L ACAD. SCI. USA* 1449, 1453 (1966). RNA and proteins compose fifteen percent and sixty-six percent, respectively, of human chromosomes. See *id.*

although much of this noncoding DNA affects the structure of chromosomal DNA and regulates gene expression.⁸⁶

Chromosomal DNA's functional structure consists of more than the linear sequence of its familiar guanine, adenine, thymine, and cytosine base pairs (frequently abbreviated as "G," "A," "T," and "C," respectively), which is termed its primary structure. It also includes higher levels of structure such as the pairing of bases from adjacent strands (chromosomal DNA's secondary structure), DNA's well-known double helix (its tertiary structure), and chromosomal DNA's association with cellular proteins and RNA, as well as its modification by methyl, acetyl, and phosphate groups (its quaternary structure).⁸⁷

This quaternary structure results in chromosomal DNA's being folded and twisted in specific and functionally important ways. Segments of chromosomal DNA wrap around a core of eight histone proteins, forming a functional chromosomal unit of DNA called a nucleosome.⁸⁸ This structure is significant because the uncoiled DNA molecule is too large to fit inside a cell's nucleus. The histone proteins, through their interactions with DNA and the smaller chemical substituents (such as the methyl, acetyl, or phosphate groups listed above), increase or decrease the rate at which genes are expressed, aid in the replication of chromosomal DNA required for cell division, and play a role in the repair of damaged or defective DNA.⁸⁹

B. ISOLATED DNA

DNA isolation involves many complex chemical processes. A biochemist begins by extracting chromosomal DNA from a blood or tissue sample, cutting the large molecules into numerous short fragments with enzymes, and then chemically modifying these fragments to make recombinant DNA vectors.⁹⁰ These vectors are inserted into bacterial or yeast cells, which are placed in a culture where they reproduce asexually. The cultured cells'

86. See Frederick Roth et al., *Finding DNA Regulatory Motifs Within Unaligned Noncoding Sequences Clustered by Whole-Genome mRNA Quantitation*, 16 NATURE BIOTECHNOLOGY 939, 939 (1998).

87. See Leslie Pray, *Discovery of DNA Structure and Function: Watson and Crick*, 1 NATURE EDUC. 100 (2008), available at <http://www.nature.com/scitable/topicpage/discovery-of-dna-structure-and-function-watson-397>; Leonide Sipski & Thomas Wagner, *Probing DNA Quaternary Ordering with Circular Dichroism Spectroscopy: Studies of Equine Sperm Chromosomal Fiber*, 16 BIOPOLYMERS 573, 581–82 (1977).

88. See Srinivas Chakravarthy et al., *Structure and Dynamic Properties of Nucleosome Core Particles*, 579 FED'N OF EUR. BIOCHEMICAL SOCIETIES LETTERS 895, 895–97 (2005).

89. See *id.*

90. HARVEY LODISH ET AL., MOLECULAR CELL BIOLOGY 176 (6th ed. 2008).

multiplication causes the inserted DNA vectors to replicate inside the host cells.⁹¹ Many generations of reproduction create a collection of cells, each containing fragments of recombinant DNA corresponding to the DNA sequences initially extracted from the target cells' chromosomal DNA.⁹² This collection of bacteria or yeast is termed a "DNA library" because it contains numerous synthetic DNA molecules whose sequences correspond to portions of the target cells' chromosomal DNA.⁹³

After creating a DNA library, a biochemist can synthesize a large amount of a particular DNA sequence by identifying a specific cell that contains the desired DNA fragment and then causing that cell to replicate.⁹⁴ This process results in a culture of identical cells containing large amounts of identical recombinant DNA fragments.⁹⁵ These isolated fragments are typically much shorter than the chromosomes from which they initially were extracted. They also contain only a small portion of the DNA and of the genetic information that the chromosome contained, and they are not associated with the same RNA, proteins, and chemical substituents as chromosomal DNA.⁹⁶

C. FUNCTIONAL DIFFERENCES BETWEEN CHROMOSOMAL AND ISOLATED DNA MOLECULES

Because of these structural differences between isolated DNA fragments and chromosomal DNA, isolated DNA does not possess many of the properties of chromosomal DNA discussed above.⁹⁷ Once extracted from the cellular milieu and removed from the intracellular machinery, which enable these properties, isolated DNA is much smaller than the chromosomes from which it was derived.⁹⁸ It is not self-replicating, and it does not possess the higher-level structure of chromosomes.⁹⁹ It is not

91. *Id.* at 178.

92. *Id.* at 179.

93. *Id.* For a more detailed description of the process of creating gDNA and cDNA libraries, see generally Steven R. Head et al., *Library Construction for Next-Generation Sequencing: Overviews and Challenges*, 56 BIOTECHNIQUES 61, 62–65 (2014); Michael O'Connor, Mark Peifer & Welcome Bender, *Construction of Large DNA Segments in Escherichia Coli*, 244 SCI. 1307, 1307–12 (1989).

94. LODISH ET AL., *supra* note 90, at 181.

95. *Id.* at 182.

96. *Id.*

97. *See supra* Section II.A.

98. *See Chromosomal DNA and Its Packaging in the Chromatin Fiber*, in BRUCE ALBERTS ET AL., *MOLECULAR BIOLOGY OF THE CELL* (4th ed. 2002), available at <http://www.ncbi.nlm.nih.gov/books/NBK26834/>.

99. *See generally* Stephen Cederbaum et al., *Recombinant DNA in Medicine*, 141 W. J. MED. 210, 210–22 (1984).

associated with histone proteins or with other chemical substituents, which regulate its translation into RNA.¹⁰⁰ Most isolated DNA molecules do not possess the “promoter” regions that facilitate the initiation of RNA translation. Even if they were reinserted into a human nucleus, most isolated DNA molecules would neither be expressed as proteins nor passed on to succeeding generations of the host cells.¹⁰¹ In the cell nucleus, these molecules would lack almost all of the biologically important properties of the chromosomal DNA from which they were isolated.

However, the biochemists who isolate DNA do not do so in order to replicate these biologically important properties. They do so precisely because the isolation of chromosomal DNA creates new molecules that, having been shortened and stripped from the histones and other structural elements of chromosomes, have new properties that are useful in the laboratory.¹⁰² Perhaps most importantly, isolated DNA, unlike chromosomal DNA, can be used as a template for the extracellular synthesis of identical molecules of isolated DNA.¹⁰³ Just as isolated DNA is extremely unlikely to be expressed or replicated inside a cell’s nucleus, chromosomal DNA cannot be replicated in the laboratory.

Isolated DNA, not chromosomal DNA, is what biochemists use to perform all of the diagnostic and synthetic processes now associated with the biotechnology industry. Isolated DNA can be used to synthesize DNA hybridization probes, which in turn can be used to detect a specific DNA sequence in a sample, a necessary step for genetic testing and forensic DNA

100. See S.A. Miller, D.D. Dykes & H.F. Polesky, *A Simple Salting Out Procedure for Extracting DNA from Human Nucleated Cells*, 16 NUCLEIC ACIDS RES., 1215, 1215 (1988).

101. See Geoffrey Cooper, *Recombinant DNA*, in THE CELL: A MOLECULAR APPROACH (2d ed. 2000), available at <http://www.ncbi.nlm.nih.gov/books/NBK9950/>.

102. Michael O’Conner, Mark Peifer, and W. Bender, *Construction of Large DNA Segments in Escherichia coli*, 244 SCIENCE 1307, 1307 (1989).

103. It is possible to amplify isolated DNA outside of the cell, creating multiple identical copies of the isolated DNA using a process called a polymerase chain reaction. Although this process is similar to the natural process whereby chromosomal DNA is replicated in anticipation of cell division, it is the only process that enables replication of isolate human DNA. Human chromosomes are simply too long to synthesize outside the body using current technology, disregarding the fact that such synthesis would not duplicate the higher level structure imposed by the histone proteins, methylation, acetylation, etc. See Coco Ballantyne, *Longest Piece of Synthetic DNA Yet*, SCI. AM. (Jan 24, 2008), <http://www.scientificamerican.com/article/longest-piece-of-dna-yet/?print=true> (describing the synthesis of a 582,000 base pair bacterial genome and comparing it to the shortest human chromosome, chromosome 21, which contains forty-eight million nucleotides).

identification.¹⁰⁴ It can be directly used in the synthesis of DNA vectors, which can be inserted into bacteria or yeast in order to cause the host cell to express the foreign DNA.¹⁰⁵ Isolated DNA can be used as a direct template to create recombinant DNA, which is a prerequisite for the laboratory synthesis of numerous useful and commercially important biochemicals.¹⁰⁶ Because of the many structural differences between chromosomal and isolated DNA, chromosomal DNA cannot be used for any of the immediately preceding purposes.

The *Myriad* Court considered the patent eligibility of two types of synthetic isolated DNA: gDNA and cDNA. The coding regions of these two categories of molecules are chemically indistinguishable but are derived from different naturally occurring templates.¹⁰⁷ gDNA, which the Court ultimately held patent ineligible, comes from DNA libraries composed of fragments of chromosomal DNA.¹⁰⁸

cDNA, ultimately held patent eligible, is synthesized from a different starting material. cDNA synthesis, rather than employing digested DNA as the initial template for the polymerase chain reaction, starts with messenger RNA (“mRNA”) molecules.¹⁰⁹ cDNA synthesis begins with the extraction of mRNA from the body. The biochemist then synthesizes a complementary strand of DNA (hence the “c” in “cDNA”) from the mRNA, before employing the same steps as described above for the synthesis of gDNA.

104. See Marilena Aquino de Moro, *Probe Design, Production, and Applications*, in *MEDICAL BIOMETHODS HANDBOOK* 13–23 (John Walker & Ralph Rapley eds., 2005).

105. This was the process by which Chakrabarty used synthetic DNA to genetically modify his bacterium. *Diamond v. Chakrabarty*, 447 U.S. 303, 305 (1980).

106. These biochemicals include recombinant human hormones, recombinant blood clotting factors, and recombinant antiviral vaccines. Examples of each of these categories of molecules have been issued patents. See, e.g., U.S. Patent No. 4,658,021 (filed Sept. 25, 1984) (patenting human growth hormone); U.S. Patent No. 4,632,981 (filed Feb. 1, 1985) (patenting human antithrombin III); U.S. Patent No. 8,506,968 (filed Dec. 28, 2009) (patenting SARS vaccine).

107. See *Ass’n for Molecular Pathology v. Myriad Genetics, Inc. (Myriad IV)*, 133 S. Ct. 2107, 2119 (2013).

108. See *id.* at 2112.

109. See *id.* mRNA forms through the body’s natural biochemical processes, using chromosomal DNA as its template. *Messenger RNA*, GENETICS HOME REFERENCE, <http://ghr.nlm.gov/glossary=messengerrna> (last visited June 3, 2014). The mRNA molecules leave the cell nucleus, where they in turn are used as templates for protein synthesis. *Id.*

III. THE *MYRIAD* CASE: IS ISOLATED DNA PATENT ELIGIBLE?

Myriad was an atypical patent infringement case. It was the first patent case filed by the ACLU in its ninety-year history.¹¹⁰ It was the first diagnostic gene patent infringement case adjudicated by a U.S. court.¹¹¹ It was not filed by a patent holder who sought to prevent infringement, but rather by a public interest group seeking declaratory judgment on behalf of “an assortment of [twenty] medical organizations, researchers, genetic counselors, and patients.”¹¹² Out of *Myriad*’s twenty-seven patents and over five hundred claims involving the BRCA1/2 genes and methods of genetic testing,¹¹³ the plaintiffs contested only fifteen claims in seven patents.¹¹⁴ The plaintiffs characterized these patents as claiming natural human genes, natural human genes with mutations, methods of looking for mutations in natural human genes, and thoughts or abstract ideas.¹¹⁵ The plaintiffs asserted that the challenged claims encompassed “products of nature” and thus were invalid under the Patent Clause and 35 U.S.C. § 101.¹¹⁶ They also sought to invalidate the patents on the grounds that they violated the First and Fourteenth Amendments of the Constitution.¹¹⁷

The Supreme Court ultimately held that isolated gDNA is not patent eligible under § 101 because “separating [a] gene from its surrounding genetic

110. See Brendan L. Smith, *Wrangling Genes*, ABA J. (July 1, 2009, 10:10 PM), http://www.abajournal.com/magazine/article/wrangling_genes.

111. See Robert Cook-Deegan & Christopher Heaney, *Patents in Genomics and Human Genetics*, 11 ANN. REV. GENOMICS & HUMAN GENETICS 383, 397 (2010).

112. Ass’n for Molecular Pathology v. U.S. Patent & Trademark Office (*Myriad II*), 653 F.3d 1329, 1333 (Fed. Cir. 2011).

113. See Press Release, Myriad Genetics, Supreme Court Upholds Myriad’s cDNA Patent Claims (June 13, 2013), available at http://files.shareholder.com/downloads/MYGN/2967288803x0x670662/dd23be22-ca26-4919-b7e1-64630b9e47c9/MYGN_News_2013_6_13_General.pdf.

114. Plaintiffs contested the following claims: U.S. Patent No. 5,747,282 (filed Jun. 7, 1995); U.S. Patent No. 5,693,473 (filed Jun. 7, 1995); U.S. Patent No. 5,709,999 (filed Jun. 7, 1995); U.S. Patent No. 5,710,001 (filed Jun. 7, 1995); U.S. Patent No. 5,753,441 (filed Jan. 5, 1996); U.S. Patent No. 5,837,492 (filed Apr. 26, 1996); and U.S. Patent No. 6,033,857 (filed Mar. 20, 1998).

115. Complaint at 20–24, Ass’n for Molecular Pathology v. U.S. Patent & Trademark Office, 702 F. Supp. 2d 181 (S.D.N.Y. 2009) (No. 09 Civ. 4515).

116. *Id.* at 1, 3, 29.

117. *Id.* at 29 (“All of the challenged claims represent patents on abstract ideas or basic human knowledge and as such are unconstitutional under the First and Fourteenth Amendments to the United States Constitution.”).

material is not an act of invention.”¹¹⁸ In contrast, the Court found that isolated cDNA does constitute patent-eligible subject matter because “cDNA is not a ‘product of nature.’”¹¹⁹ The following summarizes the findings and rationales of the four decisions that were handed down by the three courts that took up this matter, focusing on their interpretations of the product of nature doctrine and the purified and isolated exception.

A. MYRIAD IN THE DISTRICT COURT: DNA AS INFORMATION

Since *Chakrabarty*, neither the Supreme Court nor the Federal Circuit has distinguished DNA from other chemicals. In assessing the patent eligibility of molecules other than DNA, the Federal Circuit has focused on the molecular structure and properties of the claimed molecules.¹²⁰ The USPTO has routinely issued patents on DNA sequences since 1990, reasoning:

Like other chemical compounds, DNA molecules are eligible for patents when isolated from their natural state and purified or when synthesized in a laboratory from chemical starting materials. A patent on a gene covers the isolated and purified gene but does not cover the gene as it occurs in nature.¹²¹

But in a 146-page opinion, Judge Sweet of the Southern District of New York held that Myriad’s patents on isolated human DNA were invalid because they read on products of nature; further, its diagnostic and analytical techniques consisted of abstract ideas and thus were written on patent-ineligible subject matter as well.¹²²

Judge Sweet used the construct of DNA as information as the “legal hook”¹²³ to distinguish a generation of Federal Circuit precedent. Citing

118. *Ass’n for Molecular Pathology v. Myriad Genetics, Inc. (Myriad IV)*, 133 S. Ct. 2107, 2117 (2013).

119. *Id.* at 2119.

120. The Federal Circuit’s analysis of Myriad’s composition claims likewise emphasized molecular structure and properties. *See infra* Section IV.B.2.

121. Utility Examination Guidelines, 66 Fed. Reg. 1092, 1093 (Jan. 5, 2001).

122. *Ass’n for Molecular Pathology v. U.S. Patent & Trademark Office (Myriad I)*, 702 F. Supp. 2d 181, 184–85 (S.D.N.Y. 2010).

123. *See* Conley & Makowski, *supra* note 30, at 307–08 (arguing for a reinvigoration of the product of nature doctrine). Judge Sweet’s opinion built on the logic of Conley and Makowski’s article. *See Myriad I*, 702 F. Supp. 2d at 185 (“DNA represents the physical embodiment of biological information, distinct in its essential characteristics from any other chemical found in nature. It is concluded that DNA’s existence in an ‘isolated’ form alters neither this fundamental quality of DNA as it exists in the body nor the information it encodes.”); *see also id.* at 198 (“Because it is derived from mRNA, a cDNA molecule represents an exact copy of one of the protein coding sequences encoded by the original

“DNA’s unique qualities as a physical embodiment of information,” the district court disagreed with the USPTO’s position on the patent eligibility of isolated DNA and invalidated Myriad’s patents on both gDNA and cDNA.¹²⁴ The court held that “[g]enes and the information represented by human gene sequences are products of nature universally present in each individual.”¹²⁵ Citing the above-mentioned dictum from *Chakerabarty*,¹²⁶ the court stated that neither Myriad’s isolated gDNA nor its cDNA was “markedly different” from a product of nature.¹²⁷ The court held, therefore, that none of the composition claims were valid under § 101.¹²⁸

The district court also invalidated Myriad’s process patents regarding testing for mutations in the BRCA1 and BRCA2 genes.¹²⁹ It held that Myriad’s claimed comparisons of DNA sequences were “abstract mental processes,” which therefore “also constitute[d] unpatentable subject matter under §101.”¹³⁰ It invalidated Myriad’s claimed process for determining the efficacy of potential cancer chemotherapeutic agents through cell cultures utilizing recombinant DNA technology, holding that the last process sought “to patent a basic scientific principle” and was therefore ineligible for patent protection.¹³¹ Myriad appealed the matter to the Court of Appeals for the Federal Circuit.

B. MYRIAD AT THE FEDERAL CIRCUIT: DNA IS LIKE EVERY OTHER MOLECULE

Myriad’s patents were evaluated twice by the Federal Circuit, as the Supreme Court vacated the Federal Circuit’s first judgment and remanded the case for further proceedings in light of *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*¹³² Both times, the same three-judge Federal Circuit panel ruled in the same way, reversing the district court’s ruling in part and

genomic DNA. . . . cDNA contains the identical protein coding informational content as the DNA in the body, even though differences exist in its physical form.”).

124. *Myriad I*, 702 F. Supp. 2d at 229, 181.

125. *Id.* at 229.

126. *See supra* note 67 and accompanying text.

127. *Myriad I*, 702 F. Supp. 2d at 194.

128. *Id.* at 229–30, 232.

129. *Id.* at 185.

130. *Id.*

131. *Id.* at 238.

132. 132 S. Ct. 1289 (2012). In *Prometheus*, the Court invalidated biotechnology patent claims which “involve[d] [only the application of] well-understood, routine, conventional activity.” *Id.* at 1294.

affirming it in part.¹³³ The court upheld patents on both types of isolated DNA (gDNA and cDNA), as well as Myriad's process claims for screening potential cancer therapeutics.¹³⁴ It affirmed the lower court's invalidation of Myriad's method claims for "comparing" or "analyzing" BRCA sequences as abstract mental processes but upheld Myriad's claims teaching methods for screening cancer therapeutics.¹³⁵

The Federal Circuit relied on *Chakrabarty*¹³⁶ and *Funk Brothers*¹³⁷ as the relevant framework for determining the patent eligibility of isolated DNA molecules under § 101 in light of the product of nature doctrine. The Federal Circuit held that "[t]he distinction, therefore, between a product of nature and a human-made invention for purposes of § 101 turns on a change in the claimed composition's identity compared with what exists in nature."¹³⁸ Writing for the court, Judge Lourie, a Ph.D. organic chemist, stated that the act of cleaving isolated gDNA from a naturally occurring DNA molecule creates an "independent molecular species" since "a covalent bond is the defining boundary between one molecule and another."¹³⁹ Thus, isolated gDNA is chemically distinct from naturally occurring DNA. It is not a product of nature and therefore is patent eligible. The Federal Circuit explicitly rejected the DNA-as-information formulation adopted by the district court and urged by the plaintiffs, but it recognized that this formulation could facilitate challenges to the validity of gDNA patents or method patents tied to the genome on other grounds, including nonobviousness.¹⁴⁰ Myriad's claimed inventions were held to be patent

133. Both times, each judge ruled in the same way on each of the four broad questions: patent eligibility of (1) isolated gDNA, (2) cDNA, (3) Myriad's BRCA comparison and analysis methods, and (4) Myriad's chemotherapeutic agent efficacy analysis method). See *Ass'n for Molecular Pathology v. U.S. Patent & Trademark Office (Myriad III)*, 689 F.3d 1303 (Fed. Cir. 2012); *Ass'n for Molecular Pathology v. U.S. Patent & Trademark Office (Myriad II)*, 653 F.3d 1329 (Fed. Cir. 2011).

134. *Myriad III*, 689 F.3d at 1332, 1337; *Myriad II*, 653 F.3d at 1350, 1357.

135. *Myriad III*, 689 F.3d at 1335; see also *Myriad II*, 653 F.3d at 1357.

136. *Diamond v. Chakrabarty*, 447 U.S. 303 (1980).

137. *Funk Bros. Seed Co. v. Kalo Inoculant Co.*, 333 U.S. 127 (1948).

138. *Myriad II*, 653 F.3d at 1351.

139. *Id.* at 1352.

140. The Federal Circuit stated:

Adopting this approach, the district court disparaged the patent eligibility of isolated DNA molecules because their genetic function is to transmit information. We disagree, as it is the distinctive nature of DNA molecules as isolated compositions of matter that determines their patent eligibility rather than their physiological use or benefit. Uses of chemical substances may be relevant to the non-obviousness of these substances or to method claims embodying those uses. . . . The claimed isolated DNA molecules

eligible because “Myriad’s claimed isolated DNAs exist in a distinctive chemical form—as distinctive chemical molecules—from DNAs in the human body.”¹⁴¹

C. *MYRIAD* IN THE SUPREME COURT: SPLITTING THE BABY

The Supreme Court granted certiorari on one issue: “Are human genes patentable?”¹⁴² Thus, it reexamined only the patent eligibility of isolated DNA. Unlike the two lower courts, the Supreme Court distinguished between two types of isolated DNA, gDNA and cDNA. It unanimously held (1) that isolated gDNA “is a product of nature and not patent eligible merely because it has been isolated” from the “surrounding genetic material,”¹⁴³ and (2) that cDNA is a “new and useful . . . composition of matter” and thus is patentable under § 101.¹⁴⁴ In rejecting the patent eligibility of isolated gDNA molecules, the Supreme Court endorsed the district court’s DNA-as-information paradigm: “Myriad’s claims are simply not expressed in terms of chemical composition. . . . Instead, [they] focus on the genetic information encoded in the . . . genetic *sequence*, not with the specific chemical composition of a particular molecule.”¹⁴⁵

The Court cited *Prometheus* regarding the unpatentability of “[l]aws of nature, natural phenomena, and abstract ideas” and determined that the isolated gDNA molecules Myriad claimed were unpatentable products “of nature,” rather than patent-eligible products “of invention.”¹⁴⁶ It held that “Myriad did not create or alter . . . the BRCA1 and BRCA2 genes. . . . Instead, Myriad’s principal contribution was uncovering the [genes] precise location[s] and genetic sequence[s].”¹⁴⁷ The Court ruled that Myriad’s patents did not define a “new and useful . . . composition of matter”¹⁴⁸ “with markedly different characteristics from any found in

are distinct from their natural existence as portions of larger entities, and their informational content is irrelevant to that fact. . . . [G]enes are in fact materials having a chemical nature and, as such, are best described in patents by their structures rather than their functions.

Id. at 1353.

141. *Id.* at 1351.

142. Order Granting Petition for Writ of Certiorari, *Ass’n for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S. Ct. 694, 695 (2012) (mem).

143. *Ass’n for Molecular Pathology v. Myriad Genetics, Inc. (Myriad IV)*, 133 S. Ct. 2107, 2111, 2120 (2013).

144. *Id.* at 2116, 2119.

145. *Id.* at 2118.

146. *Id.* at 2116–17.

147. *Id.* at 2116.

148. *Id.* (citing 35 U.S.C. § 101 (2012)).

nature.”¹⁴⁹ Rather, it found that Myriad’s patent descriptions primarily had detailed the iterative process of discovery by which Myriad narrowed the possible locations for the gene sequences that it sought.¹⁵⁰

The Court rejected the Federal Circuit’s analysis of gDNA’s patent eligibility, which had focused on the breaking of covalent bonds as the step whereby a new chemical moiety—and thus a “new . . . composition of matter”—had been created.¹⁵¹ It held instead that “Myriad’s claims [are not] saved by the fact that isolating DNA from the human genome severs chemical bonds.”¹⁵² The Court found gDNA too similar to naturally occurring chromosomal DNA to be patent eligible, since it consists of the same nucleotide sequence and carries the same genetic information.¹⁵³ The Court distinguished Myriad’s isolated gDNA molecules, which “existed in nature before Myriad found them,”¹⁵⁴ from the patentable bacteria in *Chakrabarty*, which possessed “markedly different characteristics from any found in nature.”¹⁵⁵ It likened Myriad’s possibly “[g]roundbreaking, innovative, or even brilliant discovery”¹⁵⁶ to the patent-ineligible discovery described in *Funk Brothers*, which “was not patent eligible because the patent holder did not alter the bacteria in any way.”¹⁵⁷

The Court’s analysis of cDNA was brief and consistent with the Federal Circuit’s ruling: cDNA “is distinct from the DNA from which it was derived. As a result, cDNA is not a ‘product of nature’ and is patent eligible under §101.”¹⁵⁸ The natural process that synthesizes mRNA using a

149. *Id.* at 2117 (citing *Diamond v. Chakrabarty*, 447 U.S. 303, 310 (1980)).

150. *Id.* at 2117–18.

151. 35 U.S.C. § 101 (2012).

152. *Myriad IV*, 133 S. Ct. at 2118.

153. *Id.* at 2116–18.

154. *Id.* at 2116.

155. *Id.* at 2117 (citing *Diamond v. Chakrabarty*, 447 U.S. 303, 310 (1980)).

156. *Id.* at 2117.

157. *Id.* (citing *Funk Bros. Seed Co. v. Kalo Inoculant Co.*, 333 U.S. 127, 132 (1948)).

158. *Id.* at 2119. Note that Claim 6 of the ’282 patent claims any isolated cDNA “having at least 15 nucleotides of the DNA” of the isolated cDNA specified in SEQ ID NO:1, where this abbreviation refers to a sequence of 5914 nucleotides that comprises a “composite full length BRCA1 cDNA.” *Id.*; see also U.S. Patent No. 5,747,282 (filed June 7, 1995). The Court here appears to exclude from patentability isolated cDNAs that arise from a single exon, possibly because these cDNAs would possess identical sequences to unpatentable isolated gDNA. See *Myriad IV*, 133 S. Ct. at 2119. However, in the case of BRCA1, one exon (exon 11) contains more than three thousand nucleotides. Thus, the ’282 patent claims millions of cDNA molecules (up to over 3000 base pairs long), which apparently satisfy the Court’s “very short series of DNA” criterion. See Deng Chu-Xia, *BRCA1: Cell Cycle Checkpoint, Genetic Instability, DNA Damage Response and Cancer Evolution*, 34 NUCLEIC ACIDS RES. 1416, 1417 (2006) (mentioning exons longer than one thousand base pairs); David Favy et al., *Real-Time PCR Quantification of Full-Length and Exon 11*

chromosomal DNA template generally involves the removal of some areas of the mRNA that are homologous to portions of the original DNA. Therefore, the laboratory process that creates “a cDNA sequence from mRNA results in an exons-only molecule that is not naturally occurring.”¹⁵⁹ The Court determined that cDNA differs from chromosomal DNA in its nucleotide sequence and, therefore, in its informational content. It held these differences adequately inventive for patent eligibility: “cDNA is not a ‘product of nature’ and is patent eligible under § 101.”¹⁶⁰

Despite the apparent clarity of the Court’s ruling, a number of ambiguities arise when the decision is examined closely. First among these is the inconsistent manner in which the Court characterizes gDNA. The opinion begins by holding “that a naturally occurring DNA segment is a product of nature and not patent eligible merely because it has been isolated.”¹⁶¹ But after distinguishing the inventiveness of Chakrabarty’s patent-eligible bacteria from Myriad’s claimed invention,¹⁶² the Court states that “Myriad’s claims [are not] saved by the fact that isolating DNA from the human genome severs chemical bonds and *thereby creates a nonnaturally occurring molecule.*”¹⁶³

The Court explains this apparent contradiction by reference to the DNA-as-information paradigm first brought into the § 101 analysis by Judge Sweet: “Myriad’s claims are simply not expressed in terms of chemical composition. . . . Instead, the claims understandably focus on the genetic information encoded in the BRCA1 and BRCA2 genes.”¹⁶⁴ The opinion then seemingly ignores the fact that Myriad’s patent claims are written on more

Spliced BRCA1 Transcripts in Human Breast Cancer Cell Lines, 274 BIOCHEMICAL & BIOPHYSICAL RES. COMM. 73, 75 (2000) (mentioning BRCA1 exons longer than one thousand base pairs).

159. *Myriad IV*, 133 S. Ct. at 2119.

160. *Id.* Note that the Court ignores the fact that, when analyzed with the same degree of scientific scrutiny with which it considers gDNA’s similarities to chromosomal DNA, cDNA is just as chemically homologous to and informationally identical with naturally occurring mRNA.

161. *Id.* at 2111. This characterization of gDNA seems to beg the question of patentability and to contradict the Court’s characterization of isolated gDNA as “nonnaturally occurring.”

162. *Id.* at 2117 (“In this case, by contrast, Myriad . . . found an important and useful gene, but separating that gene from its surrounding genetic material is not an act of invention.”).

163. *Id.* at 2118 (emphasis added).

164. *Id.* at 2118. As seen in Section IV.B.2, *supra*, the language used by Myriad to claim DNA molecules conforms with standard patent claiming language since the early 1990s.

than one quadrillion specific and unique molecules, not on the information content of the BRCA genes.¹⁶⁵

If the patents depended upon the creation of a unique molecule, then a would-be infringer could arguably avoid at least Myriad's patent claims on entire genes . . . by isolating a DNA sequence that included both the BRCA1 or BRCA2 gene and one additional nucleotide pair. . . . But Myriad obviously would resist that outcome because its claim is concerned primarily with the information contained in the genetic *sequence*.¹⁶⁶

Myriad located, sequenced, and cloned the BRCA genes to be able to sell tests that inform people of their risks of contracting certain forms of cancer.¹⁶⁷ However, Myriad's DNA patents were written on the specific molecules through which that information is transmitted, not on the sequences of As, Ts, Gs, and Cs through which scientists communicate that information.¹⁶⁸

Whereas the *Myriad* Court's scientific analysis appears to be inconsistent, its legal analysis of patent eligibility seems superficial, citing no case whose outcome was determined by judicial interpretation of the product of nature doctrine. The opinion substantively refers to only three prior patent cases: *Prometheus*, *Chakrabarty*, and *Funk Brothers*.¹⁶⁹ The Court cites *Prometheus* in a prefatory manner to establish the "important implicit exception"¹⁷⁰ to § 101's inclusive language regarding patent-eligible subject matter, which renders "[l]aws of nature, natural phenomena, and abstract ideas . . . not

165. Brief of Eric S. Lander as Amicus Curiae in Support of Neither Party at 9, *Myriad IV*, 133 S. Ct. 2107 (2013) (No. 12-398) ("In total, the claims cover more than *one quadrillion* distinct fragments from chromosome 17.').

166. *Myriad IV*, 133 S. Ct. at 2118. The Court's holding in *Myriad* is strongly informed by its conception that Myriad's patents attempt to exclude others from using information or laws of nature. As discussed in Part II, none of Myriad's genetic tests requires the use of "entire genes," and the Court's description of the information transfers during intranuclear molecular processes incompletely reflects the current state of molecular biology. *See supra* Part II.

167. *BRCA Analysis: The Value of Hereditary Cancer Testing*, MYRIAD GENETICS, <https://myriad.com/products/bracanalysis/> (last visited May 25, 2014).

168. The '282 patent contains twenty claims. The first seven are written on specific isolated DNA molecules; the remaining thirteen are written on various molecules, transformed cells, methods, and testing kits. Not one of the twenty claims includes the word "information."

169. *See Myriad IV*, 133 S. Ct. at 2116–19 (Part II of the opinion, relying almost exclusively upon *Mayo Collaborative Servs. v. Prometheus Labs.*, 132 S. Ct. 1289 (2012), *Diamond v. Chakrabarty*, 447 U.S. 303 (1980), and *Funk Bros. v. Kalo Inoculant Co.*, 333 U.S. 127 (1948)).

170. *Myriad IV*, 133 S. Ct. at 2116 (citing *Prometheus*, 132 S. Ct. at 1293).

patentable.”¹⁷¹ After briefly discussing this exception, the Court emphasizes the patent system’s fundamental goal of “promot[ing] the Progress of Science and useful Arts.”¹⁷² It states that “[w]e must apply this well-established standard to determine whether Myriad’s patents claim any ‘new and useful . . . composition of matter’ or instead claim naturally occurring phenomena.”¹⁷³ The Court seems to refer to *Prometheus* in order to lay a foundation for the policy considerations underlying issues of patent-eligible subject matter, rather than to cite particular precedent that specifically informs its decision in *Myriad*.¹⁷⁴

The Court relied on *Funk Brothers* and *Chakrabarty* to delineate its requirement for inventiveness in patent-eligible products.¹⁷⁵ It distinguished Myriad’s DNA molecules from Chakrabarty’s genetically engineered bacteria, which in dictum the *Chakrabarty* Court described as “new, with markedly different characteristics from any found in nature.”¹⁷⁶ It found Myriad’s position more like that of the putative inventor in *Funk Brothers*, whose

171. *Id.* For a fuller discussion of the product of nature doctrine, see *supra* Part I.

172. U.S. CONST., art. I, § 8, cl. 8. The *Myriad* Court stated: “As we have recognized before, patent protection strikes a delicate balance between creating ‘incentives that lead to creation, invention, and discovery’ and ‘imped[ing] the flow of information that might permit, indeed spur, invention.’” *Myriad IV*, 133 S. Ct. at 2116 (quoting *Prometheus*, 132 S. Ct. at 1305).

173. *Myriad IV*, 133 S. Ct. at 2116 (internal citations omitted) (citing 35 U.S.C. § 101 (2012)).

174. The Court was aware of the policy ramifications of its decision, which the Justices addressed during oral argument:

JUSTICE KENNEDY: And—and that avoids giving special industries special subsidies. . . . If we were to accept the Government’s position that the DNA is not patentable but the cDNA is, would that give the industry sufficient protection for innovation and research? And if not, why not?

Transcript of Oral Argument at 58, *Ass’n for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S. Ct. 2107 (2013) (No. 12-398).

JUSTICE SOTOMAYOR: Is there some value to us striking down isolated DNA and upholding the cDNA? If we were to do what the Government is proposing in this case, what’s the consequences?

Id. at 61.

175. “Myriad recognizes that our decision in *Chakrabarty* is central to this inquiry.” *Myriad IV*, 133 S. Ct. at 2116. The Court continued:

In *Funk Brothers* . . . this Court considered a composition patent that claimed a mixture of naturally occurring strains of bacteria that helped leguminous plants take nitrogen from the air and fix it in the soil. . . . [This] patent claim thus fell squarely within the law of nature exception. So do Myriad’s.

Id. at 2117.

176. *Myriad IV*, 133 S. Ct. at 2117 (citing *Chakrabarty*, 447 U.S. at 310).

claims “[did] not disclose an invention or discovery within the meaning of the patent statutes.”¹⁷⁷ Similarly, Myriad’s “discovery [of the BRCA genes], by itself, [did] not render the BRCA genes ‘new . . . composition[s] of matter’ that are patent eligible.”¹⁷⁸ The degree of inventiveness required to clone DNA clearly falls somewhere between mixing three strains of bacteria and creating a new species.¹⁷⁹ However, the Court’s inconsistent scientific and brief legal analyses shed little light on where to place the complex process of cloning DNA molecules on the spectrum of inventiveness as related to patent eligibility.

The last paragraph of the opinion cites “what is *not* implicated by this decision.”¹⁸⁰ It notes that no method claims were before the Court in *Myriad*. Thus, “innovative method[s] of manipulating genes,” “new applications of knowledge” about the claimed isolated gDNA strands, and synthetic DNA strands “in which the order of the naturally occurring nucleotides has been altered” all would present “a different inquiry.”¹⁸¹ The Court concludes by emphasizing its reliance on DNA’s information content and seems to limit *Myriad*’s applicability beyond DNA molecules: “We merely hold that genes and the information they encode are not patentable under § 101 simply because they have been isolated from the surrounding genetic material.”¹⁸² The *Myriad* Court drew a line between two very similar molecules: gDNA is not patent eligible because it has the same nucleotide sequence and carries the same genetic information as naturally occurring chromosomal DNA. cDNA, on the other hand, is patent eligible because it does not share this chemical and informational identity with chromosomal DNA.¹⁸³

177. *Funk Bros.*, 333 U.S. at 132.

178. *Myriad IV*, 133 S. Ct. at 2117 (citation omitted). Note the ongoing confusion regarding Myriad’s claimed molecules. As discussed in Section I.C, *supra*, and as reflected in the language of the claims examined by the Court, Myriad’s patents were written on isolated DNA molecules, not on “genes.”

179. The *Chakrabarty* Court held that Chakrabarty “produced a new bacterium. . . .” *Chakrabarty*, 447 U.S. at 310. In contrast, the *Funk Brothers* Court held that the putative inventor had merely “provided a mixed culture of [bacteria] . . . belonging to several cross-inoculation groups.” *Funk Brothers*, 333 U.S. at 130.

180. *Myriad IV*, 133 S. Ct. at 2119.

181. *Id.* at 2119–20.

182. *Id.*

183. Despite its reliance on the importance of gDNA’s informational equivalence with naturally occurring chromosomal DNA, the *Myriad* Court does not address the informational equivalence of cDNA with naturally occurring mRNA.

IV. SUBSEQUENT DEVELOPMENTS

Ten months after *Myriad* was handed down, Dr. Ostrer, the lone remaining plaintiff, does not offer a BRCA test that competes with Myriad's genetic test aimed at determining the presence of BRCA1 or BRCA2 gene mutations, the so-called "BRCAanalysis test."¹⁸⁴ Myriad is involved in MDL with five of its competitors regarding whether their competing tests do or might infringe its patents, and the USPTO has issued new guidelines for the evaluation of patents that appear to have been written on natural products.¹⁸⁵ These facts make it difficult to interpret the impact of the decision on the parties to the suit, much less on the patent system as a whole.

A. ONGOING LAWSUITS CONCERNING MYRIAD'S PATENTS

Unsurprisingly, given the financial stakes and Myriad's position that the Court only "invalidated five [of its 520] patent claims covering isolated naturally occurring DNA, . . . thereby reducing [its] patent estate to 24 patents and 515 patent claims," Myriad and its potential competitors disagree on the reach of the decision.¹⁸⁶ Myriad has sued each large company that has announced its entry into the lucrative arena of BRCA testing.¹⁸⁷ The first of these cases was settled out of court under terms that prohibit the alleged infringer from offering standalone BRCA testing in North America.¹⁸⁸ However, Myriad lost its bid for a preliminary injunction enjoining Ambry Genetics from selling or offering to sell genetic tests, including a BRCA1 or BRCA2 panel.¹⁸⁹ Judge Shelby, who oversees the ongoing MDL, denied the

184. Telephone Interview with Dr. Harry Ostrer, Professor, Albert Einstein College of Medicine (Apr. 16, 2014).

185. See *infra* Sections IV.A, IV.C.

186. See Complaint, Univ. of Utah Research Found. v. Ambry Genetics Corp., Case No. 2:13-cv-00640-RJS (D. Utah July 9, 2013).

187. Less than one month after the Supreme Court issued its opinion, Myriad began to sue competitors that had entered the BRCA testing market, prompting an additional wave of countersuits and declaratory judgment actions from accused or potential infringers. See *Myriad Legal Consequences Stem from Supreme Court Gene Case*, NEWLEGALREVIEW (Jan. 16, 2014), <http://newlegalreview.cpaglobal.com/myriad-legal-consequences-stem-supreme-court-gene-case>. In February 2014, the U.S. Judicial Panel on Multidistrict Litigation combined five actions relating to fourteen of Myriad's patents for MDL management in the District of Utah. *In re BRCA1- and BRCA2-Based Hereditary Cancer Test Patent Litig.*, No. 2:14-MD-2510, 2014 WL 690559 (J.P.M.L. Feb. 19, 2014). At the time of writing, litigation is still ongoing.

188. See Press Release, Gene by Gene, Ltd. & Myriad Genetics, Inc., BRCA Patent Owners and Gene by Gene, Ltd. Resolve Patent Suit (Feb. 7, 2014), *available at* <http://online.wsj.com/article/PR-CO-20140207-907847.html>.

189. *In re BRCA1- and BRCA2-Based Hereditary Cancer Test Patent Litig.*, MDL No. 2:14-MD-2510, 2014 WL 931057, at *4 (D. Utah Mar. 10, 2014).

petition in part because Myriad was “unable to establish that [it is] likely to succeed on the merits of [its] claims.”¹⁹⁰

B. EARLY CASES CITING *MYRIAD*

Two district court cases have relied on *Myriad* to evaluate subject matter eligibility of DNA-related patents. In *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, Judge Illston of the Northern District of California extended *Myriad*'s reasoning to method patents.¹⁹¹ She granted summary judgment to an alleged infringer of a patent written on methods of testing for cell-free DNA, one of the many types of DNA not explicitly under review by the *Myriad* Court.¹⁹² In a decision that frequently cited *Myriad*, Judge Illston held that “even though *Myriad* involved composition claims rather than method claims,” it also supports the conclusion that the plaintiff's claims were written on patent-ineligible subject matter.¹⁹³

Genetic Technologies Ltd. v. Agilent Technologies, Inc. involved a method patent that implicates another type of DNA not fully analyzed by the *Myriad* Court: chromosomal DNA corresponding to “noncoding” intronic regions.¹⁹⁴ In denying the alleged infringer's motion to dismiss, Judge Seeborg, also of the Northern District of California, again referred to *Myriad*:

Agilent argues that, unlike cDNA, amplified DNA is not patent eligible under *Myriad*. Even so, [Genetic Technologies] does not

190. *Id.* at *4 (D. Utah Mar. 10, 2014); see also Andrew Pollack, *Patentholder on Breast Cancer Tests Denied Injunction in Lawsuit*, N.Y. TIMES, Mar. 10, 2014, <http://www.nytimes.com/2014/03/11/business/patentholder-on-breast-cancer-tests-denied-injunction-in-lawsuit.html> (last accessed March 14, 2014).

191. No. C 11-06391 SI, 2013 WL 5863022 (N.D. Cal. Oct. 30, 2013).

192. *Id.* at *1–2.

193. As in Section IV.C, *supra*, and in the immediately following discussion of *Genetic Technologies v. Agilent*, the *Myriad* Court expressly limited its holding to Myriad's composition of nature claims. Judge Illston, however, reasoned:

Even though *Myriad* involved composition claims rather than method claims, that decision also supports the [*Ariosa*] Court's conclusion. . . . Although the Supreme Court was not presented with method claims, the Court explained “[h]ad Myriad created an innovative method of manipulating genes while searching for the BRCA1 and BRCA2 genes, it could possibly have sought a method patent. But the processes used by Myriad to isolate DNA were well understood by geneticists at the time of Myriad's patents” Similarly, had the inventors of the [Sequenom] patent created an innovative method of performing DNA detection while searching for paternally inherited cffDNA, . . . those claims would be patentable.

Id. at *10 (internal citations omitted.).

194. No. CV 12-01616 RS, 2014 WL 941354 (N.D. Cal. Mar. 7, 2014).

purport to have patented the amplified DNA itself, but rather methods utilizing amplified DNA. The Court in *Myriad* was careful to point out that its decision did not reach any method claims or applications of natural laws.¹⁹⁵

The degree to which district courts and, more importantly, the Federal Circuit will choose to extend *Myriad*'s logic clearly remains to be seen.

C. USPTO GUIDELINES FOR DETERMINING SUBJECT MATTER ELIGIBILITY

The USPTO seems to have a much clearer view of *Myriad*'s ramifications vis-à-vis the patent eligibility of isolated DNA molecules and the evaluation of patent claims written on “natural products.” Arguably, it takes a more expansive view than may be justified by the language of the ruling. On the day the *Myriad* decision was released, the USPTO's deputy commissioner interpreted *Myriad* as holding that “claims to isolated DNA are not patent eligible under 35 U.S.C. § 101” and instructed patent examiners to “reject product claims drawn solely to naturally occurring nucleic acids or fragments thereof, whether isolated or not, as being ineligible subject matter under 35 U.S.C. § 101.”¹⁹⁶

Nine months later, the USPTO issued a more comprehensive Guidance to its examiners covering the examination of “all claims (i.e., machine, composition, manufacture and process claims) reciting or involving laws of nature/natural principles, natural phenomena, and/or natural products.”¹⁹⁷ This Guidance supersedes the June Memorandum and “addresses the impact

195. *Id.* at *7 n.17. Note that this case does not implicate the product of nature doctrine. Rather, involves the validity of a patent written on technology alleged to be patent ineligible because it implicates a law of nature, another of the three judicial carve-outs cited by the *Myriad* Court.

196. Memorandum from Andrew H. Hirschfeld, Deputy Comm'r for Patent Examination Policy, USPTO, to Patent Examining Corps, Supreme Court Decision in *Association for Molecular Pathology v. Myriad Genetics, Inc.*, United States Patent and Trademark Office (June 13, 2013) [hereinafter June Memorandum], available at http://www.uspto.gov/patents/law/exam/myriad_20130613.pdf. The June Memorandum does seem partially to retract its overly inclusive first sentence when it states in its second paragraph that “[c]laims clearly limited to non-naturally-occurring nucleic acids, such as a cDNA or a nucleic acid in which the order of the naturally-occurring nucleotides has been altered (e.g., a man-made variant sequence), remain eligible.” *Id.*

197. Memorandum from Andrew H. Hirschfeld, Deputy Comm'r for Patent Examination Policy, USPTO, to Patent Examining Corps, Guidance For Determining Subject Matter Eligibility of Claims Reciting or Involving Laws of Nature, Natural Phenomena, & Natural Products, United States Patent and Trademark Office (Mar. 4, 2014) [hereinafter Guidance], available at http://www.uspto.gov/patents/law/exam/myriad-mayo_guidance.pdf.

of [*Myriad*] . . . on the Supreme Court’s long-standing ‘rule against patents on naturally occurring things.’”¹⁹⁸ It establishes a three-step algorithm procedure that examiners are to use in determining whether a claim is drawn to patent-eligible subject matter. The inquiry requires examiners to ask whether “the claim as a whole recite[s] something significantly different than the judicial exception(s)” and then establishes twelve factors that examiners are to weigh in deciding whether a claim “as a whole recites something significantly different than the [natural product] itself.”¹⁹⁹

Both the June Memorandum and the newly promulgated Guidance likely were intended to clarify the USPTO’s interpretation of the *Myriad* decision and to increase the uniformity of the patent examination process. However, it is not clear that either document accurately reflects the content of the *Myriad* decision.²⁰⁰

V. CONCLUSION

Myriad establishes a bright-line rule concerning the patent eligibility of two types of DNA molecules: gDNA is not patent eligible, but some cDNA is.²⁰¹ The Supreme Court based this distinction on an incomplete and seemingly contradictory scientific understanding of the chemistry, and on

198. *Id.*

199. *Id.*

200. The June Memorandum clearly misstated the Court’s holding in its first sentence: “Today in *Association for Molecular Pathology v. Myriad Genetics, Inc. (Myriad)*, the Supreme Court held that claims to isolated DNA are not patent-eligible under 35 U.S.C. § 101.” June Memorandum, *supra* note 196. However, as discussed in note 196, *supra*, the June Memorandum subsequently retreats from this overly broad interpretation. The Guidance tasks examiners with assessing whether a patent application covers something “significantly different than what exists in nature” as a prerequisite for subject matter eligibility, although the term “significantly different” is not used in the *Myriad* decision. Guidance, *supra* note 197, at 5. *Myriad*, in dictum, does refer to the *Chakrabarty* “markedly different” dictum: “The *Chakrabarty* bacterium was new ‘with markedly different characteristics from any found in nature.’” *Ass’n for Molecular Pathology v. Myriad Genetics, Inc. (Myriad IV)*, 133 S. Ct. 2107, 2117 (2013) (quoting *Diamond v. Chakrabarty*, 447 U.S. 303, 310 (1980)). For early analysis of some troubling aspects of the USPTO’s Guidance, see, e.g., Courtenay C. Brinkerhoff, *United States: Do Pharmaceutical Compositions Have Patent Subject Matter Eligibility Under the New USPTO Guidelines?*, MONDAQ (Mar. 14, 2014), <http://www.mondaq.com/unitedstates/x/299892/Life+Sciences+Biotechnology/Do+Pharmaceutical+Compositions+Have+Patent+Subject+Matter+Eligibility+Under+the+New+USPTO+Guidelines>; Paul Cole, *USPTO Patent Eligibility Guidelines: A Topsy Turvy Approach for Natural Products*, IPWATCHDOG (Mar. 10, 2014), <http://www.ipwatchdog.com/2014/03/10/uspto-patent-eligibility-guidelines-natural-products/id=48451>.

201. cDNA molecules corresponding to chromosomal DNA that does not cross an intron-exon boundary may not be patent-eligible. See *supra* note 158.

limited and vaguely articulated legal reasoning. Taken together, these shortcomings of the *Myriad* opinion seem likely to restrict the applicability of the *Myriad* decision beyond its specific holding that isolated gDNA and some other analogous forms of DNA are not patent eligible. District courts may interpret *Myriad* in a number of different ways, each of which likely would be consistent with the Court's reasoning. They may regard *Myriad* as having added a "markedly different" requirement to the language of § 101 for subject matter patentability. They may see the *Myriad* Court as having followed the product of nature doctrine by stating that, based on the underlying science, gDNA does not qualify for the "isolated and purified" exception. They may surmise that *Myriad* added a new judicially created "information content" exception to § 101 patent-eligible subject matter: a composition of matter that is informationally identical to a naturally occurring product is not patent eligible. Finally, they may construe *Myriad* as having created a *sui generis* exception to the "isolated and purified" exception to the product of nature doctrine, which applies only to nucleic acids. Although the USPTO seems to have embraced the "markedly different" concept, the Federal Circuit, the de facto final arbiter of *Myriad*'s reach, may be more inclined to view *Myriad* as a *sui generis* exception that applies only to nucleic acids.

Regarding the "markedly different" interpretation of *Myriad*, the Court quoted language from *Chakrabarty* regarding the patent ineligibility of naturally occurring substances, but it did not thoroughly analyze either gDNA or cDNA to explain how the former is different but not "markedly different" from naturally occurring compositions, whereas the latter is "markedly different." Rather, in its analysis of cDNA, the Court merely stated that cDNA was "unquestionably . . . something new."²⁰² The Court did not give any meaningful guidance regarding what specific differences in structure, function, and utility make a claimed molecule "markedly different" from a similar naturally occurring molecule and thus patent eligible. The Court also did not clearly elucidate this standard, and it did not distinguish prior circuit court jurisprudence regarding either the product of nature exception to subject matter patentability or the "isolated and purified" exception. This lack of guidance makes it likely that lower courts' analyses of these matters, except as specifically regards the patent eligibility of DNA molecules, largely will continue to be based on prior Federal Circuit case law.

The degree to which the Court embraced Judge Sweet's DNA-as-information paradigm also is somewhat unclear. The Court did emphasize its

202. *Myriad IV*, 133 S. Ct. 2107, 2119 (2013).

interpretation that Myriad's "claim is concerned primarily with . . . information."²⁰³ However, it did not illuminate exactly what it meant by genetic information, what criteria could be used when examining a composition patent in order to determine whether the molecular structure or informational content predominated in a given claim, or which chemicals other than DNA are amenable to an information-content analysis in determining their patent eligibility. Thus, it may be difficult for a lower court to take meaningful direction from *Myriad* when analyzing a patent claim under this new paradigm.

It therefore appears that *Myriad* will be significant to current holders of isolated DNA patents but that its reach will be limited to its specific holding: gDNA is not patent eligible, and some cDNA is. The Court's unwillingness to expound on its scientific analysis and legal reasoning gives little motivation for the Federal Circuit to extend *Myriad's* precedential reach beyond DNA molecules. Furthermore, the Court failed to grapple with Federal Circuit precedent commenting on other purified isolated biological chemicals that have been held patent eligible. These facts, coupled with the Court's reliance on DNA's unique properties as an information-carrying molecule, are likely to relegate *Myriad's* legacy to having merely created a new carve out precluding the patent eligibility of some synthetic DNA molecules.

203. *Id.* at 2118.

BREACHING RAND AND REACHING FOR REASONABLE: *MICROSOFT V. MOTOROLA* AND STANDARD-ESSENTIAL PATENT LITIGATION

Kassandra Maldonado[†]

Technological innovation is rarely, if ever, created without utilizing prior innovations. As Carl Shapiro noted, “[t]he essence of science is cumulative innovation,” and cumulative innovation “is central to the scientific method.”¹ However, cumulative innovation can be complicated by a vast array of intellectual property rights.² These intellectual property rights are particularly problematic in the context of standard setting.³ In standard setting, any patents that are necessary to implement a chosen standard are labeled standard essential patents (“SEPs”).⁴ As new technological creations incorporate prior discoveries, individual patent holders, upon whose technological discoveries broader technological creations are built, are endowed with significant market power to determine licensing rates.⁵

As a result, standard-setting organizations (“SSOs”) typically require their members to commit to license any SEP on reasonable and nondiscriminatory (“RAND”) terms prior to incorporation into a standard.⁶ Although the RAND commitment is meant to incentivize adoption of the standard by requiring SEP holders to license on reasonable terms, patentees are given considerable power in setting rates.⁷ The power to set rates is magnified by

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1. Carl Shapiro, *Navigating the Patent Thicket: Cross Licenses, Patent Pools, and Standard Setting*, in *INNOVATION POLICY AND THE ECONOMY* 119, 119 (Adam B. Jaffe, Josh Lerner & Scott Stern eds., 2000).

2. *Id.* at 120 (stating that, in light of cumulative innovation, stronger patent rights can stifle innovation by creating a maze of patent rights that innovators must navigate through).

3. *Id.* at 136.

4. *Id.*

5. *Id.*

6. European SSOs typically require their members to license on fair, reasonable and nondiscriminatory terms (“FRAND”). FRAND and RAND are used interchangeably in this Note.

7. See Mark A. Lemley, *Intellectual Property Rights and Standard-Setting Organizations*, 90 CALIF. L. REV. 1889, 1906 (2002). For a more in depth discussion of “reasonableness,” see *infra* Part III.

the lack of guidance as to what “reasonable” licensing means.⁸ The lack of guidance as to what is “reasonable” unleashed a flood of litigation seeking to define what constitutes reasonable royalty rates and to establish an enforcement mechanism to the RAND commitment and a remedy for when the commitment is breached.⁹

The so-called “Smartphone Wars” have only fueled this litigation.¹⁰ As a result of the escalation of patent litigation, smartphone makers have sought to increase their mobile technology patent portfolios, which often contain SEPs.¹¹ Although it has been suggested that smartphone war litigation could be reduced by the cross-licensing of RAND-encumbered patents,¹² continuing litigation has shown that cross-licensing has done little to stem the tide of litigation.¹³ In the wake of this litigation, judicial decisions are emerging that use contract law to determine what enforcement mechanisms and remedies exist in light of the RAND commitment and what constitutes “reasonable” for a RAND rate.¹⁴

These recent judicial determinations are the subject of this Note, which focuses primarily on the district court litigation between Microsoft Corporation and Motorola, Inc. (hereinafter “*Microsoft*”) and discusses how Microsoft’s breach of contract action demonstrates the usefulness of contract law as the enforcement mechanism for the RAND commitment. Additionally, this Note examines Judge Robart’s calculation of the RAND royalty range and discusses how the calculation provides a pathway to “reasonable” RAND royalty rates and a remedy, should licensing negotiations stall. Part I provides a contextual background to *Microsoft* by looking at the rise of standard-essential patent litigation. Part II examines the contractual arguments and decisions of *Microsoft* and subsequent cases, and

8. Lemley, *supra* note 7 at 1906.

9. For a listing of SEP litigation cases, see *Litigations Involving SEPs*, ESSENTIAL PATENT BLOG (Dec. 20, 2014), <http://essentialpatentblog.com/list-of-litigations-involving-seps>.

10. MIKE LLOYD, DORIS SPIELTHENNER & GEORGE MOKDSI, THE SMARTPHONE PATENT WARS 4 (2011), available at <http://www.iam-magazine.com/blog/articles/GriffithHackSmartphonesReportFinal.pdf>.

11. Thomas H. Chia, Note, *Fighting the Smartphone Patent War with RAND-Encumbered Patents*, 27 BERKELEY TECH. L.J. 209, 213 (2012).

12. *See id.*

13. *See, e.g., In re Innovatio IP Ventures, LLC Patent Litig.*, MDL 2303, 2013 U.S. Dist. LEXIS 144061 (N.D. Ill. Oct. 3, 2013); *Microsoft Corp. v. Motorola, Inc.*, No. C10-1823JLR, 2013 U.S. Dist. LEXIS 60233 (W.D. Wash. Apr. 25, 2013); *Apple, Inc. v. Samsung Elec. Co.*, No. 11-cv-01846-LHK, 2012 WL 2571719 (N.D. Cal. June 30, 2012).

14. *See Microsoft*, No. C10-1823JLR, 2013 U.S. Dist. LEXIS 60233; *Innovatio*, MDL 2303, 2013 U.S. Dist. LEXIS 144061.

demonstrates that the current state of contract law in SEP litigation provides a useful enforcement mechanism to the RAND commitment. Part III examines the first judicial determination of a RAND royalty rate in *Microsoft* and the subsequent determination of a RAND rate in *In re Innovatio IP Ventures, LLC Patent Litigation*.¹⁵ Part IV concludes by discussing how to use recent case law to navigate and, if need be, enforce the RAND commitment.

I. *MICROSOFT V. MOTOROLA* AND ITS HISTORY

In November 2010, Microsoft filed a breach of contract suit against Motorola.¹⁶ Just one week before filing the suit, Microsoft received an offer letter stating Motorola's licensing terms for their SEPs relating to the Institute of Electrical and Electronics Engineers ("IEEE") 802.11 wireless local area network ("WLAN") standard ("802.11 Standard") and the International Telecommunication Union ("ITU") H.264 advanced video coding technology standard ("H.264 Standard").¹⁷ The complaint alleged that Motorola breached its contractual obligations to the IEEE and ITU to license their SEPs on RAND terms.¹⁸ Motorola offered a royalty rate of 2.25 percent per unit of the end product price for each Microsoft product implementing Motorola's standards, amounting to a \$4 billion cash payment.¹⁹ Three years later, the trial court reached the first final judgment of a RAND rate, and the jury found that Motorola had breached its contractual commitments to the ITU and IEEE to license on RAND terms.²⁰

Microsoft provided an enforcement mechanism and remedy that the RAND commitment has long been without, a pathway that has been followed in subsequent cases. However, the historic nature of *Microsoft* is better understood with a review of the context underlying SEP litigation and the RAND commitment.

15. See *In re Innovatio*, 2013 U.S. Dist. LEXIS 144061.

16. *Microsoft Corp. v. Motorola, Inc.*, 696 F.3d 872, 877–78 (9th Cir. 2012).

17. *Id.*

18. *Id.* at 878.

19. *Id.*

20. *Microsoft Corp. v. Motorola, Inc.*, No. C10-1823JLR, 2013 U.S. Dist. LEXIS 60233 (W.D. Wash. Apr. 25, 2013); Verdict Form at 2, *Microsoft Corp. v. Motorola, Inc.*, No. C10-1823JLR, 2013 WL 5398081 (W.D. Wash. Sept. 4, 2013).

A. INCENTIVIZING INNOVATION BY EASING THE HOLD OF LEGAL MONOPOLIES

A patent is, at its heart, the right to exclude.²¹ This exclusive right of inventors grants a temporary, legal monopoly in order to reward innovation to “promote the Progress of Science and useful Arts.”²² The tension between innovation and competition in patent law is one that creates interesting and complex challenges in our legal system. SEP litigation is a manifestation of the tension between innovation and competition, spurred by the increased need for interoperability in the technological marketplace and challenged by rapid development and assertion of huge patent portfolios. Standard-setting organizations attempted to mitigate the tension between proprietary rights and the need for interoperability by requiring members whose technology would be incorporated into the standard to promise to license to any implementer of the standard on RAND terms.²³ In a modern economy driven by technological innovation, standards and RAND policies play incredibly important roles.

Broadly defined, standards are “any set of technical specifications that either provides or is intended to provide a common design for a product or process.”²⁴ In 1997, President Clinton’s administration noted that standards were critical to the “long term commercial success” of emerging technological markets due to the increased interoperability that occurs as a result of standardization.²⁵ Simply put, interoperability is “the ability of two or more networks, systems, devices, applications or components to exchange information between them and to use the information so exchanged. . . . [P]roducts of one manufacturer can interoperate seamlessly with products from a different manufacturer.”²⁶ This quality allows technological markets to develop more broadly and with reduced cost to consumers.²⁷

21. *eBay, Inc. v. MercExchange, L.L.C.*, 547 U.S. 388, 391–97 (2006).

22. U.S. CONST. art. I, § 8, cl. 8.

23. See, e.g., *Common Patent Policy for ITU-T/ITU-R/ISO/IEC*, ITU, <http://www.itu.int/en/ITU-T/ipr/Pages/policy.aspx> (last visited Feb. 6, 2014) [hereinafter *ITU Common Patent Policy*].

24. Lemley, *supra* note 7, at 1896.

25. William J. Clinton & Albert Gore, Jr., *A Framework for Global Electronic Commerce at Article III § 9* (July 1, 1997), <http://clinton4.nara.gov/WH/New/Commerce/read.html> (“To ensure the growth of global electronic commerce over the Internet, standards will be needed to assure reliability, interoperability, ease of use and scalability.”).

26. Tim Frain, *Patents in Standards & Interoperability 1* (World Intellectual Property Organization, Nov. 29, 2006), available at http://www.wipo.int/export/sites/www/meetings/en/2006/patent_colloquia/11/pdf/frain_paper.pdf.

27. See Michael L. Katz & Carl Shapiro, *Systems Competition and Network Effects*, 8 J. ECON. PERSP. 93, 109 (1994). Standardization across an industry can have significant

Private SSOs typically create standards, which are then adopted through network effects or other market pressures.²⁸ For example, the 3rd Generation Partnership Program created the 4G LTE standard.²⁹ LTE launched in parts of Europe in 2009, and the first major American carriers voluntarily switched and launched in 2010, with others quickly following.³⁰ For a short period of time, CDMA³¹ carriers intended to use a rival standard, but after major American, Canadian, and Asian carriers migrated to LTE, CDMA carriers announced that they too would also adopt the LTE standard.³² Interoperability concerns and market pressures ensured the voluntary and market-wide adoption of a private, SSO-created standard.

The shift from standard setting being done by governmental figures to private-sector SSOs has been occurring for decades.³³ The development of telecommunication standards in 1979 in particular increased involvement from the private-sector SSOs due to rapidly advancing technology and increasing need for interoperability.³⁴ Private-sector SSOs exist in industries as wide-ranging as aeronautics, manufacturing, power and SmartGrid, health and medicine, e-commerce, defense, telecom, and electronics.³⁵ SSOs cover technical categories such as multimedia, cloud computing, grid computing, Internet, computer networking, semiconductors, software, web services, etc.³⁶

consumer benefits, such as increasing membership to the industry as a whole, reducing the need to duplicate equipment, and increasing competition. *See id.* at 105–06. The effects of standardization are particularly important in network markets, in which the value of a product to a particular consumer is a function of how many other consumers use the same or a compatible network. *See Lemley, supra* note 7 at 1896.

28. Joseph Farrell et al., *Standard-Setting, Patents, and Hold-Up*, 74 ANTITRUST L.J. 603, 637 n.154 (2007).

29. LTE ENCYCLOPEDIA, <https://sites.google.com/site/lteencyclopedia/home> (last visited Feb. 6, 2014).

30. *Id.*

31. CDMA stands for “code division multiple access,” a channel access method used by various radio communication technologies. *Code Division Multiple Access*, PC MAGAZINE ENCYCLOPEDIA, <http://www.pcmag.com/encyclopedia/term/39462/cdma> (last visited Feb. 6, 2014).

32. Steven Hartley & Julien Grivolos, *LTE: The Future of Mobile Data*, FORBES CUSTOM, <http://www.forbescustom.com/TelecomPgs/LTEP1.html> (last visited Feb. 6, 2014).

33. For more information on the history of standard setting, see MAUREEN BREITENBERG, NAT’L BUREAU OF STANDARDS, U.S. DEPT. OF COMMERCE, *THE ABC’S OF STANDARDS-RELATED ACTIVITIES IN THE UNITED STATES 2–3* (1987).

34. *See* ROBERT W. GARNET, *THE TELEPHONE ENTERPRISE: THE EVOLUTION OF THE BELL SYSTEM’S HORIZONTAL STRUCTURE, 1876–1909* (1985).

35. A comprehensive list of SSOs by function is provided by Mark Lemley, *supra* note 7, at 1908.

36. *Id.*

Rising to prominence out of an era of technological advancement—and relevant to this Note—are the IEEE and the ITU. The IEEE’s standard-setting practice dates back to 1890, when the organization was called the American Institute of Electrical Engineers (“AIEE”).³⁷ In 1963, the AIEE merged with the Institute of Radio Engineers to form the IEEE, and the IEEE continues to support standards development today, including the 802.11 WLAN Standard.³⁸ The ITU traces its origins to 1865 as the International Telegraph Union.³⁹ Its current moniker came about in 1932, and its expertise has broadened to cover the entire information and communication technology sector, creating standards for fields ranging from mobile technologies to 3D TV, including the H.264 Video Compression Standard.⁴⁰

Although the rapid technological innovation of the late twentieth century has demonstrated the benefits of SSOs and standards generally, those benefits do not come without complications.⁴¹ Technological standards are often developed with limited acknowledgement of the proprietary nature of the technology incorporated into the standard.⁴² And although standards

37. *IEEE History*, IEEE, <http://www.ieeeahn.org/wiki/index.php/IEEE> (last visited Feb. 6, 2014).

38. *History of Institute of Electrical and Electronic Engineers (IEEE) Standards*, IEEE, [http://www.ieeeahn.org/wiki/index.php/History_of_Institute_of_Electrical_and_Electronic_Engineers_\(IEEE\)_Standards](http://www.ieeeahn.org/wiki/index.php/History_of_Institute_of_Electrical_and_Electronic_Engineers_(IEEE)_Standards) (last visited Feb. 6, 2014). The 802.11 Standard is extensively discussed in Part III of this Note. *See infra* Section III.B.4.

39. *Overview of ITU’s History*, ITU, http://www.itu.int/en/history/Pages/ITUs_History.aspx (last visited Feb. 6, 2014).

40. *Id.* The H.264 Standard is extensively discussed in Part III of this Note. *See infra* Section III.B.3

41. Although not within the scope of this paper, these complications include numerous antitrust challenges to standard setting. For a non-exhaustive listing, see generally *Microsoft Corp. v. Motorola, Inc.*, 696 F.3d 872 (9th Cir. 2012); *Rambus Corp. v. FTC*, 522 F.3d 456 (D.C. Cir. 2008); *Apple, Inc. v. Motorola Mobility, LLC*, No. 11-cv-178-bbc, 2012 WL 5416941 (W.D. Wisc. Oct. 29, 2012); *Apple, Inc. v. Samsung Elec. Co.*, No. 11-cv-01846-LHK, 2012 WL 2571719 (N.D. Cal. June 30, 2012); *In re Motorola Mobility LLC*, Docket No. 121-0120 (F.T.C. Jan. 3, 2013); *Broadcom Corp. v. Qualcomm, Inc.*, 501 F.3d 297 (3d Cir. 2007); *In re Negotiated Data Solutions LLC (N-Data)*, Docket No. C-4234 (F.T.C. Sept. 22, 2008). *See also* U.S. DEP’T OF JUSTICE & FED. TRADE COMM’N, ANTITRUST ENFORCEMENT AND INTELLECTUAL PROPERTY RIGHTS: PROMOTING INNOVATION AND COMPETITION 53–56 (2007); IEEE STANDARDS ASS’N, PROMOTING COMPETITION AND INNOVATION: WHAT YOU NEED TO KNOW ABOUT THE IEEE STANDARDS ASSOCIATION’S ANTITRUST AND COMPETITION POLICY (2010), available at <http://standards.ieee.org/develop/policies/antitrust.pdf>.

42. IEEE STANDARDS ASS’N, STANDARDS BOARD BYLAWS § 6.2 (2013), available at http://standards.ieee.org/develop/policies/bylaws/sb_bylaws.pdf [hereinafter IEEE BYLAWS] (stating that standards may be drafted to include essential patent claims). For the

incorporate non-proprietary technology, it is inevitable that proprietary technology will be incorporated and implemented. Implementation of proprietary technology would, of course, normally lead to litigation and the awarding of damages or an injunction—which would discourage adoption of the standard. The RAND commitment was created to overcome the risks implementers face in adopting the standard and balance the loss of the patent holder’s right to exclude with reasonable royalty rates.

B. STANDARD-ESSENTIAL PATENTS AND THE RAND COMMITMENT

The process of developing standards varies depending on the SSO. Most SSOs require their members to disclose any patents or pending patent applications that might be relevant to the standard prior to adoption.⁴³ SSO members must declare which of their patents are essential to the practice of the prospective standard and must agree to license any such essential patent on RAND terms.⁴⁴ By definition, patents are essential to the standard if the patent “is necessary to implement either an optional or mandatory provision of a standard.”⁴⁵ Importantly, SSOs themselves do not investigate into whether patents declared to SEPs really are essential to the standard.⁴⁶ This policy of self-declaration by patent holders, although no doubt practically necessary in terms of limited SSO resources, appears to result in over-declaration.⁴⁷

A member’s decision to over-declare is, in a way, a guessing game. Typical buyer-seller negotiations involve assigning a value for the product

IEEE, Letters of Assurance are required before adoption of the standard but not before drafting. *Id.*

43. See, e.g., *Letter of Assurance for Essential Patent Claims*, IEEE, http://standards.ieee.org/about/sasb/patcom/loa-802_11-kpn-08Jan2013.pdf (last visited Feb. 6, 2014); *General Patent Statement and Licensing Declaration Form For ITU-T or ITU-R Recommendation*, ITU, http://www.itu.int/dms_pub/itu-t/oth/04/04/T04040000010003PDFE.pdf (last visited Feb. 6, 2014).

44. See Thomas F. Cotter, *The Comparative Law and Economics of Standard-Essential Patents and FRAND Royalties*, 22 TEX. INTELLECTUAL PROP. L.J. (forthcoming 2014) (manuscript at 4), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2318050; see also IEEE BYLAWS, *supra* note 42, § 6.2.

45. *Microsoft Corp. v. Motorola Inc.*, No. C10-1823JLR, 2013 U.S. Dist. LEXIS 60233, at *26 (W.D. Wash. Apr. 25, 2013).

46. Cotter, *supra* note 44, at 2.

47. See ROBERT A. MYERS, *Fairfield Res. Int’l, Inc., REVIEW OF PATENTS DECLARED AS ESSENTIAL TO LTE AND SAE (4G WIRELESS STANDARDS) THROUGH JUNE 30, 2009 7* (2010), available at [http://www.frlicense.com/LTE Final Report.pdf](http://www.frlicense.com/LTE%20Final%20Report.pdf) (studying the extent to which patents declared essential to the 3GPP 4G LTE standard are actually essential and finding that of the 210 patent families with declared SEPs, only 105 families actually contain a patent essential to the standard).

prior to purchase. Answering difficult and detailed questions of validity and value would be a huge expenditure for a business to endure each time it wished to monetize its patent portfolio, particularly in light of the patent holder's twenty-year exclusive right.⁴⁸ Furthermore, because engineers manage the standard-setting process, a business can send only the necessary engineers to SSOs to participate in the standards process, rather than a cadre of lawyers and expert witnesses to argue the value of the patent. This is economically efficient considering the cost of legal services and the possibility that the patents have no real commercial value.⁴⁹ Finally, if a patent has low economic value due to commercially viable alternatives, it would behoove the patent holder to have its technology incorporated into a standard and receive reasonable royalty fees from a wide licensee base.⁵⁰ All of these factors can push a member into declaring its patent as essential and committing to license its technology for royalty rates.

Royalty rates are the mechanism by which SSOs contractually incentivize participation in the standard in order to advance adoption of the standard and thereby increase interoperability.⁵¹ In exchange for reasonable royalty rates, essential patent holders must promise, in either an individually written letter or in a form Letter of Assurance ("LOA"), to license to any implementer for a reasonable royalty rate prior to their official inclusion into the standard.⁵² Conversely, the implementer obtains a legal way to use proprietary technology in exchange for a reasonable sum of money and without the risk (ideally) of infringement accusations.⁵³ The question then

48. See Doug Lichtman, *Understanding the RAND Commitment*, 47 HOUS. L. REV. 1023, 1028 (2010).

49. *Id.* at 1029.

50. It should be noted from a practical standpoint that there might be a simple element of the unknown in over-declaration. At the time a standard is being developed, the SSO member may have a patent application under prosecution but not an issued patent with set claims. Additionally, the standard itself may still be in flux, so what may be declared essential in one week may not be essential at the time the standard is actually implemented.

51. Section 8.1 of the IEEE's policies outlines its objective "[t]o develop and publish broadly accepted standards and other standards-related documents that will advance the theory and practice of electrical engineering, electronics, computer science." IEEE, IEEE POLICIES § 8.1 (2014), available at http://www.ieee.org/documents/ieee_policies.pdf [hereinafter IEEE POLICIES].

52. Should patent holders decline to give licensing assurances, the technology will not be incorporated into the standard. See, e.g., *ITU Common Patent Policy*, *supra* note 23.

53. The RAND commitment also reduces the risk of antitrust litigation. See Jon Leibowitz, Chairman, Fed. Trade Comm'n, Opening Remarks as Prepared for Delivery in *In the Matter of Motorola Mobility LLC and Google, Inc.* 3 (Jan. 3, 2013), in Respondent Apple Inc.'s Notice of New Authority and New Facts Relevant to Issues on Review at 10, *In re Certain Elec. Devices, Including Wireless Commc'n Devices, Portable Music Data Processing Devices, & Tablet Computers*, No. 337-TA-794 (U.S.I.T.C. May 22, 2013), 2013 WL

arises: does the patent holder, by making such a promise, not just weaken its exclusive right, but relinquish it altogether?

Logically, the answer is yes. If the purpose of the SSO is to ensure widespread adoption of a standard, the agreement to license on RAND terms is a statement that the patent can and *will* be licensed to any implementer on reasonable terms. The simple language of the commitment leaves little, if any, wiggle room.⁵⁴ Letters of Assurance may be one of the simplest contracts in intellectual property.

However, the simple format of the LOA does not provide much assistance in interpreting the contract. Like much of contract law, the question boils down to one of reasonableness. What is “reasonable”? Who determines reasonableness? How is reasonableness determined? These are all questions that the contract itself does not answer and whose answers are discussed further in Part III of this Note.⁵⁵ However, underlying this discussion of “reasonable” are policy concerns that have arisen, particularly in the contexts of the Smartphone Wars.

C. “THE SMARTPHONE WARS” AND INCREASED SCRUTINY ON SEP LITIGATION

The scrutiny on standard-essential patent litigation has dramatically increased in recent years. In 2011, every major smartphone maker was embroiled in litigation at the ITC or federal courts.⁵⁶ Although the high stakes of patent infringement litigation should have been removed from

2453722 (stating that “commitments to make patents available on reasonable terms matter and . . . companies cannot make those commitments when it suits them—that is, to have their patents included in a standard and then behave opportunistically later, once the standard is in place and those relying on it are vulnerable to extortion”).

54. For example, the IEEE form Letter of Assurance asks that the patent holder check one of four boxes. The first states that the SEP holder will grant licenses without compensation. The second option is the RAND commitment. The third is a promise that the SEP holder without conditions will not enforce any present or future SEP claims against any implementer. And the fourth option provides that the patent holder is not willing to either grant licenses or refrain from enforcing its patents, at which point its technology would not be incorporated into the standard. See *Letter of Assurance for Essential Patent Claims*, IEEE, <http://grouper.ieee.org/groups/1788/Patents/letter-of-assurance-form.pdf> (last visited Feb. 6, 2014).

55. See *infra* Part III.

56. Sam Favate, *Patent Trolls And Smartphone Wars Mean More Litigation—Survey*, WALL ST. J. (Dec. 1, 2011, 11:55 AM), <http://blogs.wsj.com/law/2011/12/01/patent-trolls-and-smartphone-wars-mean-more-litigation-survey>. The numerous patent infringement lawsuits that smartphone manufacturers have brought against each other as part of the business competition for the smartphone market gave rise to the moniker “The Smartphone Wars.” LLOYD, SPIELTHENNER & MOKDSI, *supra* note 10, at 4.

RAND licensing negotiations, patent portfolios are rarely neatly divided between SEPs and non-SEPs. RAND licensing negotiations often involve agreements, or demands even, for cross-licensing of an implementers non-SEPs in exchange for licensing royalty rates for the SEP holders technology.⁵⁷ In the intense competition over the smartphone market, SEPs became not only a tool with which SEP holders could gain access to non-SEP technology in cross-licensing, but a “strategic policy weapon.”⁵⁸

Strategic use of SEPs started primarily as a defensive weapon.⁵⁹ For example, if Apple sued Google for patent infringement of the iPhone design patent, Google could then leverage its SEPs for the 802.11 Wi-Fi Standard (should Apple not yet have a license to those SEPs) as a basis to either force Apple to cross-license or threaten Apple with an injunction for infringement of the SEPs should litigation continue. This type of behavior has focused scrutiny on three primary policy concerns underlying SEPs: patent holdup, royalty stacking, and injunctive relief.⁶⁰ These concerns are briefly addressed and are meant to be illustrative rather than comprehensive.

Although adoption of an SSO standard is “voluntary” in theory, actual market pressures tip the scales considerably towards compulsory adoption of SSO standards in practice. Implementation of some standards, such as the 802.11 WLAN Standard,⁶¹ is absolutely necessary to the commercial viability of certain products, even if the standard makes up only a small portion of the products. Because implementation is essentially required to compete in the market, SEP holders are able to extract royalties from implementers beyond the actual economic value added by the SEP.⁶² This gap between technological added value and the ultimate royalty extracted is at the core of “patent holdup.”⁶³ Post-adoption, owners of SEPs gain substantial negotiating power and corresponding patent value “as a result of an adoption decision itself that is not directly related to the incremental value of the

57. Dan O'Connor, *Standard-Essential Patents in Context: Just a Small Piece of the Smartphone War Puzzle*, PATENT PROGRESS (Mar. 5, 2013), <http://www.patentprogress.org/2013/03/05/standard-essential-patents-in-context-just-a-small-piece-of-the-smartphone-war-puzzle/> (stating that large companies often forgo cash payments for their SEPs in exchange for cross-licensing agreements).

58. *Id.*

59. *Id.*

60. *Id.*

61. The 802.11 WLAN Standard is a Wi-Fi standard and allows for companies to build products to a set of specifications for wireless local area networking. *See infra* Section III.B.4.

62. *See* Mark A. Lemley & Carl Shapiro, *Patent Holdup and Royalty Stacking*, 85 TEX. L. REV. 1991, 1993 (2007).

63. *Id.*

technology.”⁶⁴ It was this initial fear of patent holdup that the RAND commitment was meant to ameliorate.⁶⁵

The fear of patent holdup is compounded when a manufacturer creates a single, multi-component device that requires implementation of multiple SEPs and, as a result, must pay multiple royalties to the owner(s).⁶⁶ This scenario, known as “royalty stacking,” is a problem for implementers on two levels. The first is simple arithmetic. Hypothetically, an implementer’s royalty fees could exceed the price at which the product could viably be sold, resulting either in infringement or withdrawal from the market.⁶⁷ Second, the stacked royalty rate is not simply the sum of the individual royalty rates for each patent holder.⁶⁸ Royalty rates are not negotiated in a vacuum. Royalty rates paid to one SEP holder significantly influence the negotiations of other royalty rates, causing the stacked royalty rate to be the sum of multiple inflated rates and higher than the true economic value.⁶⁹

More recently, these concerns have been augmented by the possibility of injunctive relief. The threat of injunctions grants an SEP holder significant leverage to set royalty rates from an implementer, most dramatically where the SEP covers only one small component of a multi-component, profitable product.⁷⁰ This leverage would have been largely eliminated by the Supreme Court’s ruling in *eBay, Inc. v. MercExchange L.L.C.*,⁷¹ if not for the continuing vitality of injunctions from the International Trade Commission (“ITC”).

In *eBay*, the Court set higher standards for granting injunctive relief.⁷² The *eBay* requirement that monetary damages be inadequate to remedy the harm, coupled with the RAND commitment to license, in theory, effectively rules

64. James Ratliff & Daniel L. Rubinfeld, *The Use and Threat of Injunctions in the RAND Context*, 9 J. COMPETITION L. & ECON. 1, 3 (2013).

65. See, e.g., *ITU Common Patent Policy*, *supra* note 23.

66. This situation is the norm in the technology world, with devices like computers, smartphones, tablets, and gaming systems.

67. Unlike in non-SEP cases, design-around is not an option. Because standards require manufacturers to use certain technologies, manufacturers cannot practically design around a standard, as a lack of interoperability would make the product practically worthless.

68. Lemley & Shapiro, *supra* note 62, at 2011.

69. *Id.*

70. *Id.* at 1995.

71. *eBay, Inc. v. MercExchange, L.L.C.*, 547 U.S. 388 (2006); see Benjamin Peterson, *Injunctive Relief in the Post-eBay World*, 23 BERKELEY TECH. L.J. 193, 193 (2008) (stating that in *eBay* the Court significantly reduced the frequency with which injunctions can be granted).

72. Under the *eBay* test, to obtain injunctive relief, a plaintiff must prove: (1) that it has suffered an irreparable injury; (2) that remedies available at law, such as monetary damages, are inadequate to compensate for that injury; (3) that, considering the balance of hardships between the plaintiff and defendant, a remedy in equity is warranted; and (4) that the public interest would not be disserved by a permanent injunction. *eBay*, 547 U.S. at 391–97.

out injunctive relief in the SEP litigation context.⁷³ However, as a result of its distinctive statutory/institutional regime, the ITC authorizes exclusion orders under a more lax standard than district courts apply in assessing injunctive relief, thus allowing a forum for SEP holders to seek injunctions against SEP implementers.⁷⁴

II. CREATING AN ENFORCEMENT MECHANISM: THE ROLE OF CONTRACT LAW IN *MICROSOFT V. MOTOROLA*

Due to the promissory nature of the LOA, SSO members inevitably turned to contract law to enforce the RAND commitment. The use of injunctive relief and exclusion orders increasingly resulted in calls for policy change regarding SEPs.⁷⁵ This Part examines how *Microsoft*, bolstered by subsequent rulings, demonstrates that contract law is the enforcement mechanism the RAND commitment has lacked by looking at judicial determinations of contract formation, third-party beneficiary status, the implied duty of good faith and fair dealing, and injunctive relief.⁷⁶

A. INTRODUCTION

Microsoft filed a breach of contract suit in November 2010, after receiving from Motorola two letters offering to license the 802.11 Standard

73. See, e.g., Farrel et al., *supra* note 28, at 638; Lemley, *supra* note 7, at 1967; Lichtman, *supra* note 48, at 1023 n.6; Joseph Miller, *Standard-Setting, Patents, and Access Lock-in: RAND Licensing and the Theory of the Firm*, 40 IND. L. REV. 351, 358 (2007).

74. Peterson, *supra* note 71, at 215. In particular, concern arose in regards to these more lax standards due to non-practicing entities (“NPEs”) turning to the ITC to pursue patent remedies. See Colleen Chien, Patent Trolls by the Numbers 6 (Mar. 13, 2013), available at <http://digitalcommons.law.scu.edu/facpubs/609>. Additionally, the Obama administration expressed concern over exclusion orders granted by the. See Letter from Michael Froman, U.S. Trade Representative, to The Honorable Irving A. Williamson, Chairman, Int’l Trade Comm’n (Aug. 3, 2013), available at <http://pub.bna.com/ptcj/FromanITCreversal13Aug3.PDF> [hereinafter Presidential Veto] (vetoing the exclusion order barring Apple from importing devices that infringe essential patents held by Samsung and citing concern over “undue leverage” gained through the threat of an exclusion order).

75. See, e.g., The Innovation Act, H.R. 3309, 113th Cong. (2013) (giving the FTC authority to regulate unfair licensing demands). The bill has since passed the House and is up for debate in the Senate. *Id.*

76. The conception of SSO’s IP rules as contractually binding on SSO members has been articulated in academic literature since at least 2002. See Lemley, *supra* note 7, at 1909–17. At that time, there was no case law using contract theory to enforce the RAND commitment. Contract law was once again discussed as a possible enforcement mechanism in SEP litigation with the rise of the smartphone wars, and *Microsoft* provided the first final judgment of a full, breach of contract RAND action.

and the H.264 Standard.⁷⁷ Microsoft argued that (1) Motorola's RAND commitment constituted a contract with the IEEE, (2) Motorola's RAND commitment constituted a contract with the ITU, (3) that Microsoft was a third-party beneficiary to these contracts, and (4) that Motorola breached its contractual obligation to license on RAND terms by making blatantly unreasonable offers and by seeking injunctive relief.⁷⁸

On September 4, 2013, the jury found that (1) Motorola breached its contractual commitment to the IEEE, (2) Motorola breached its contractual commitment to the ITU, (3) Motorola breached the implied duty of good faith and fair dealing in seeking injunctive relief with respect to its contractual obligations to the IEEE, and (4) Motorola breached the implied duty of good faith and fair dealing in seeking injunctive relief with respect to its contractual obligations to the ITU.⁷⁹ Although the jury ultimately determined that a breach had been committed, the court performed the majority of the contract analysis, including the threshold issue: Is the RAND commitment a contract?

B. THE THRESHOLD ISSUE: IS THE RAND COMMITMENT A CONTRACT?

The answer is yes.⁸⁰ Judge Robart's determination of the RAND commitment as a contract is not controversial in the legal academic community.⁸¹ However, its importance lies in the fact that *Microsoft* is the first fully litigated breach of contract RAND action resulting in a RAND determination. On February 27, 2012, Microsoft received summary judgment in its favor on the issue of contract formation.⁸² The court held that Motorola

77. *Microsoft Corp. v. Motorola, Inc.*, 696 F.3d 872, 877 (2012).

78. *Id.* at 878.

79. Verdict Form at 2–3, *Microsoft Corp. v. Motorola, Inc.*, No. C10-1823JLR, 2013 WL 5398081 (W.D. Wash. Sept. 4, 2013).

80. *See Microsoft Corp. v. Motorola, Inc.*, 864 F. Supp. 2d 1023, 1030 (W.D. Wash. 2012).

81. For academic articles regarding the contractual nature of the RAND commitment and the use of contract law as an enforcement mechanism, see, for example, Jorge L. Contreras, *Rethinking RAND: SDO-Based Approaches to Patent Licensing Commitments* (Oct. 10, 2012), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2159749; Thomas F. Cotter, *supra* note 44; Mark A. Lemley & Carl Shapiro, *A Simple Approach to Setting Reasonable Royalties for Standard-Essential Patents*, 28 BERKELEY TECH. L.J. 1135 (2013) [hereinafter Lemley & Shapiro, *A Simple Approach*]; Mark A. Lemley, *Ten Things to Do About Patent Holdup of Standards (And One Not To)*, 48 B.C. L. REV. 149 (2007) [hereinafter Lemley, *Ten Things to Do*]; Lichtman, *supra* note 48; Ratliff & Rubinfeld, *supra* note 64.

82. *Microsoft Corp. v. Motorola, Inc.* 854 F. Supp. 2d 993, 1002–04 (W.D. Wash. 2012).

entered into binding contractual commitments with the IEEE and the ITU by committing to license its SEPs on RAND terms.⁸³

Motorola had contended that Motorola's commitments to the IEEE and ITU were unilateral offers to grant licenses on RAND terms.⁸⁴ Motorola argued that implementers, "if they satisfy the conditions to apply for a license in some form and negotiate, are entitled to the license."⁸⁵ Motorola understood LOAs as creating a contract between the SEP holder and the *licensee* once the licensee has applied for a license and negotiated with the SEP holder.⁸⁶

This conception of the LOA as a unilateral offer twists the original purpose of the RAND commitment. In the RAND context, the standard itself ensures that the implementer cannot choose an alternate technology to incorporate. To transform the conception of the RAND commitment as a contract between an SEP holder and an SSO into a conception of the RAND commitment as a unilateral offer between an SEP holder and an implementer increases the problem of unequal bargaining power. SEP holders would have the ability to set any price they wish and have no obligation to negotiate with implementers. Because such unequal bargaining power is contrary to the purposes of the RAND commitment, the court correctly rejected Motorola's unilateral offer theory and reaffirmed that the LOA forms a contract between the SEP holder and the SSO.⁸⁷

Of course, contract formation requires an offer, acceptance, and consideration.⁸⁸ First, upon learning that a standard incorporates a privately held patent, the IEEE and ITU request an LOA from the SEP holder to state its intention either not to enforce its patent, to license on RAND terms, or to decline incorporation into the standard.⁸⁹ The court found that the requests for assurance constituted offers to the patent holder so that the SSO can choose whether to incorporate the patented technology into the standard.⁹⁰ The court then concluded that Motorola's LOAs to the IEEE and ITU "constitute acceptances for purposes of contract formation . . . [b]y

83. *Id.*

84. *Id.* at 1030.

85. *Id.* at 1031.

86. *Id.*

87. *Id.* This ruling is not without precedent. *See, e.g.,* Research in Motion Ltd. v. Motorola, Inc., 644 F. Supp. 2d 788, 797 (N.D. Tex. 2008), *Ericsson Inc. v. Samsung Elecs. Co.*, No. 2:06-CV-63, 2007 WL 1202728, at *1 (E.D. Tex. Apr. 20, 2007).

88. *Microsoft Corp. v. Motorola, Inc.*, 864 F. Supp. 2d 1023, 1031 (W.D. Wash. 2012).

89. *Id.* For the language used by the IEEE and ITU, see *supra* note 43.

90. *Id.* at 1032. The court also noted that historically, the IEEE has not included technology in a standard for which it has not received an LOA. *Id.*

checking the box on both IEEE and ITU forms that it is willing to grant licenses on RAND terms.”⁹¹ The final element—consideration—was met by the SSOs’ promise to include, or to consider including, the patented technology in exchange for Motorola’s promise to license on RAND terms.⁹² In light of valid offer, acceptance, and consideration, the court held that Motorola’s promises to the IEEE and ITU to license its SEPs on RAND terms were binding contracts.⁹³

C. THIRD-PARTY BENEFICIARY STATUS: THE NECESSARY ELEMENT

Holding that the RAND commitment constituted a legally enforceable promise provided a cause of action to implementers. However, implementers still needed the ability to enforce the RAND contract. In answering this need, the court turned to Microsoft’s status as a third-party beneficiary.⁹⁴ A third-party beneficiary, though not party to a contract, is able to sue upon a contract if the contract was for the third-party’s direct benefit.⁹⁵ The question became whether the RAND commitment was for the potential licensees’ benefit.⁹⁶

Judge Robart noted that the benefit of the RAND commitment was for implementers, stating that “[t]hese commitments are clearly designed to benefit potential licensees of Motorola’s standard essential patent by ensuring that such patents are readily accessible to everybody at reasonable rates.”⁹⁷ The court held that, as a member of the IEEE and ITU and as a potential user of the 802.11 and H.264 Standards, Microsoft “is a third-party

91. *Id.*

92. *Id.*

93. *Id.* Judge Robart’s holding has since been echoed in subsequent cases. In *Realtek Semiconductor Corp. v. LSI Corp.*, citing *Microsoft*, Judge Whyte stated “[t]here is no dispute in this case that [LSI] entered into a binding contract with the IEEE to license their declared standard essential patents.” 946 F. Supp. 2d 998, 1005 (N.D. Cal. 2013). See also *In re Innovatio IP Ventures, LLC*, MDL No. 2303, No. 11-C-9308, 2013 WL 3874042, at *4 (N.D. Ill. July 26, 2013) (noting that the “parties do not dispute that the letters . . . to the IEEE constitute binding contractual commitments to the IEEE and its members); *Apple, Inc. v. Motorola Mobility, Inc.*, 886 F. Supp. 2d 1061, 1084 (W.D. Wis. 2012) (holding that Motorola’s promise to license on RAND term constituted a binding contract). Of course, this spate of recent decisions is not without precedent. The RAND commitment has also been judicially held in earlier decades to be a valid contract. See, e.g., *ESS Technology, Inc. v. PC-Tel, Inc.*, No. C-99-20292, 1999 WL 33520483, *4 (N.D. Cal. Nov. 4, 1999) (holding that the software manufacturer had a properly stated claim for specific performance of a contract requiring the defendant to license patents on nondiscriminatory and reasonable terms).

94. *Microsoft*, 864 F. Supp. 2d at 1032.

95. *Id.*

96. *Id.* at 1033.

97. *Id.*

beneficiary of Motorola's commitments to the IEEE and ITU," and is therefore entitled to sue for breach of the RAND contract.⁹⁸ This holding provided implementers with an enforcement mechanism to the RAND commitment.

Motorola, in its cross-claims, argued that Microsoft's rights as a third-party beneficiary were conditioned upon Microsoft (1) applying for a license and (2) negotiating for a RAND license to those patents.⁹⁹ Motorola then argued that, since Microsoft had failed to meet the two conditions precedent, Microsoft had repudiated any rights to a RAND license.¹⁰⁰ The court rejected this argument.¹⁰¹ After examination of the IEEE and ITU policies, the court held that it was not the intent of Motorola and the IEEE or ITU to require an implementer of a standard to first apply for and negotiate a license as conditions precedent to Motorola's RAND obligations.¹⁰²

Although an SSO could hypothetically choose to include such conditions precedent in its RAND commitments, such conditions are contrary to the purposes of RAND in multiple respects. First, requiring potential implementers to first apply for and negotiate a RAND license in order to be recognized as a third-party beneficiary would slow innovation. Licensing discussions are lengthy and complicated. If a licensee were unable to implement the standard until a RAND rate had been negotiated, adoption of the standard would be slowed or disincentivized.¹⁰³ Second, the terminology of "apply for" is problematic because it implies the possibility of a refusal to license. RAND licensing, by its nature, must be available to any implementer. Finally, requiring implementers to apply and negotiate for a RAND license before the SEP holder has any affirmative obligation to license weakens the enforcement mechanism that contract law offers. In this case, had Microsoft been required to apply and negotiate first, Motorola would have been able to skirt its commitments to the IEEE and ITU simply by preemptively contacting Microsoft before it had applied, thus negating Motorola's RAND commitments.¹⁰⁴

98. *Id.* at 1032–33.

99. *Id.* at 1033.

100. *Id.* at 1034.

101. *Id.* at 1033–34.

102. *Id.* at 1034 (“The court is disinclined to find that either applying for a license or negotiating in good faith are conditions precedent.”).

103. This may also lead to antitrust concerns for the SEP holder, opening them to accusations of suppressing competition by submitting companies to lengthy negotiations or denying implementers access to the standard at all.

104. *Id.* at 1035. Motorola also argued that Microsoft had repudiated its third-party rights by filing a breach of contract action. *Id.* The court stated that it “will not find that

D. THE DUTY OF GOOD FAITH AND FAIR DEALING: A NEW STANDARD?

The next step in using contract law as an enforcement mechanism for the RAND commitment is establishing the standard for breach of contract. The jury in *Microsoft* used the duty of good faith and fair dealing as the standard for breach of contract.¹⁰⁵ Because market pressures often force implementers to adopt a standard and implement patented technology, acting in good faith becomes paramount to RAND royalty negotiations. To allow SEP holders to institute negotiations without a standard of conduct would permit them to take advantage of implementers' required participation, leading to undue leverage in negotiations.

In *Microsoft*, Motorola challenged the use of the duty of good faith and fair dealing as a standard for finding a breach contract because there is no "free floating" duty of good faith and fair dealing.¹⁰⁶ The court agreed but stated that there is a duty of good faith and fair dealing implied in every contract that arises out of fulfillment of contractual obligations.¹⁰⁷ Therefore, the implied duty of good faith and fair dealing stemmed from Motorola's LOAs and declarations to the IEEE and ITU to license on RAND terms.¹⁰⁸ The court instructed the jury that Motorola had an obligation to license its SEPs on RAND terms and that in moving towards a RAND license, Motorola had a duty to act in good faith and fair dealing.¹⁰⁹

However, defining the duty of good faith and determining when it has been breached are challenging tasks. The court noted that there is no uniform definition of the implied duty of good faith and fair dealing.¹¹⁰ Rather, the duty of good faith and fair dealing arises in context, and it is the province of the jury to determine whether the duty of good faith and fair dealing has been breached.¹¹¹

The uncertainty and unpredictability surrounding the duty of good faith and fair dealing offers the possibility of rekindling negotiation. If standardization is based on RAND licensing, the negotiation process is a

Microsoft has repudiated its rights to a RAND license by simply seeking court relief in attempting to enforce the terms of Motorola's [RAND] commitment." *Id.* at 1036.

105. Verdict Form at 3, *Microsoft Corp. v. Motorola, Inc.*, No. C10-1823JLR, 2013 WL 5398081 (W.D. Wash. Sept. 4, 2013).

106. *Microsoft Corp. v. Motorola, Inc.*, No. C10-1823JLR, 2013 U.S. Dist. LEXIS 138786, at *34 (W.D. Wash. Sept. 24, 2013).

107. *Id.*

108. *Id.*

109. *Id.*

110. *Id.* at *5.

111. *Id.*

necessary part of that licensing. The duty of good faith and fair dealing removes the “take-it-or-leave-it” stance that seems inherent in outrageously high licensing demands and requires a baseline code of conduct and at least some actual negotiation. Additionally, some courts have taken the position that seeking injunctive relief prior to RAND negotiations is a breach of contract, though without invoking the duty of good faith and fair dealing as a standard.¹¹²

E. THE RAND COMMITMENT AND THE PROPRIETY OF INJUNCTIVE RELIEF

Much of the discussion of this Note has been circling around the propriety of injunctive relief in the RAND context. Concerns over injunctive relief are present in concerns over undue leverage and patent holdup, subjects of much academic consideration.¹¹³ And although injunctive relief is never desirable to an implementer, an SEP holder seeking injunctive relief does provide an immediate harm that the implementer can use to bring a breach of contract action and enforce the SEP holder’s RAND commitment.

1. *The eBay Factors in the RAND Context*

Under *eBay*, in order to obtain injunctive relief a plaintiff must prove: (1) that it has suffered an irreparable injury; (2) that remedies available at law, such as monetary damages, are inadequate to compensate for that injury; (3) that, considering the balance of hardships between the plaintiff and defendant, a remedy in equity is warranted; and (4) that the public interest would not be disserved by a permanent injunction.¹¹⁴

Under the logic of *eBay*, injunctive relief in the RAND context is inappropriate. First, the SEP holder has not suffered an irreparable injury.

112. In *Realtek Semiconductor*, Judge Whyte held:

[D]efendants breached their contractual obligations to IEEE and to Realtek as a third-party beneficiary of that contract by seeking injunctive relief against Realtek before offering Realtek a license. The court’s breach of contract holding is limited to the situation here, where defendants did not even attempt to offer a license, on “RAND” terms or otherwise, until after seeking injunctive relief. This conduct is a clear attempt to gain leverage in future licensing negotiations and is improper.

Realtek Semiconductor Corp. v. LSI Corp., 946 F. Supp. 2d 998, 1008 (N.D. Cal. 2013).

The court’s discussion of an “improper” and “clear attempt to gain leverage” seems to invoke the notion of breaching the duty of good faith and fair dealing that is inherent within every contract. *Id.*

113. See, e.g., Lemley, *Ten Things to Do*, *supra* note 81, at 158 (advocating for a system that takes injunctive relief “off the table” for standard-essential patents).

114. *eBay, Inc. v. MercExchange, L.L.C.*, 547 U.S. 388, 391 (2006).

The SEP holder has agreed to exchange its exclusive right to the market for its particular technology in exchange for reasonable royalty rates; therefore, an implementer's use of patented technology cannot constitute an irreparable injury.¹¹⁵ Second, monetary damages in the RAND context are completely adequate for any injury. Again, the SEP has *already* committed to exchanging its proprietary technology in exchange for royalty rates. Monetary damages are the precise remedy that would be applied to an SEP situation. Finally, injunctive relief is inappropriate because the public interest is disserved by a permanent injunction. As previously discussed, standardization and implementation provide many benefits for consumers, including greater product competition, interoperability of products, and lower prices.¹¹⁶ If injunctions are granted at will, adoption of standards will be disincentivized, decreasing interoperability and harming consumers.

2. Microsoft v. Motorola: *A Narrowed Question*

In July of 2011, after the litigation in Washington began, Motorola filed for injunctive relief in Germany against certain Microsoft products, including the Xbox.¹¹⁷ In May of 2012, the German court granted the injunction.¹¹⁸ Microsoft then filed an action in the District Court for the Western District of Washington seeking to enjoin Motorola from enforcing the German injunction.¹¹⁹ While deciding to enjoin Motorola from enforcing the German injunction, Judge Robart also noted that there is “jurisprudential debate about the availability of injunctive relief to enforce SEPs.”¹²⁰

The Ninth Circuit, in upholding Judge Robart's ruling, suggested that injunctive relief is not appropriate in the RAND context.¹²¹ Although it is likely dicta, the court stated, “injunctive relief against infringement is arguably a remedy inconsistent with the licensing commitment.”¹²² The Ninth Circuit also noted that Motorola's declaration to the ITU to license on RAND terms is a sweeping promise that implies “a guarantee that the patent-holder will not take steps to keep would-be users from using the patented material, such as seeking an injunction, but will instead proffer licenses consistent with the

115. For a fuller discussion of these factors, see *id.*

116. See *supra* Section I.A.

117. Microsoft Corp. v. Motorola, Inc., 696 F.3d 872, 879 (9th Cir. 2012).

118. *Id.*

119. *Id.* at 875.

120. Microsoft Corp. v. Motorola, Inc., No. C10-1823JLR, 2013 U.S. Dist. LEXIS 138786, at *33 (W.D. Wash. Sept. 24, 2013).

121. *Microsoft*, 696 F.3d at 872.

122. *Id.* at 885.

commitment made.”¹²³ Finally, the Ninth Circuit noted that skepticism of injunctive relief was expressed by Justice Kennedy in his concurrence in *eBay*, stating that injunctions “‘may not serve the public interest’ in cases where ‘the patented invention is but a small component of the product the companies seek to produce and the treat of an injunction is employed simply for undue leverage in negotiations.’”¹²⁴

In September 2013, the jury in the district court returned a verdict finding that Motorola’s actions in seeking injunctive relief violated its duty of good faith and fair dealing.¹²⁵ Despite the Ninth Circuit’s unfavorable view of injunctions in the RAND context, the district court took a cautious approach in its jury instructions and “did not instruct the jury that Motorola had waived its right to seek injunctive relief.”¹²⁶ Rather, the jury instructions stated that Motorola had a contractual obligation to license its SEPs on RAND terms and that, in doing so, Motorola was required to comply with the duty of good faith and fair dealing.¹²⁷ The jury would then determine if Motorola had violated the duty of good faith and fair dealing by seeking injunctive relief in light of the ongoing litigation and its RAND commitment.¹²⁸ By refusing to grant summary judgment on the issue of injunctive relief and making it a jury question, the court removed itself from a policy debate and narrowed the question to Motorola’s behavior in the context of this particular case.¹²⁹

Since *Microsoft*, courts have addressed the appropriateness of injunctive relief in the RAND context. In *Realtek Semiconductor Corp. v. LSI Corp.*, the

123. *Id.* at 885.

124. *Id.* at 877 (quoting *eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 388, 396–97 (2006) (Kennedy, J., concurring)).

125. Verdict Form at 3, *Microsoft Corp. v. Motorola, Inc.*, No. C10-1823JLR, 2013 WL 5398081 (W.D. Wash. Sept. 4, 2013).

126. *Microsoft Corp. v. Motorola, Inc.*, No. C10-1823JLR, 2013 U.S. Dist. LEXIS 138786, at *33 (W.D. Wash. Sept. 24, 2013).

127. *Id.*

128. *Id.* However, in its November 30, 2012, Order dismissing Motorola’s request for injunctive relief in the district court action, the court held that injunctive relief is an inappropriate remedy because “Motorola has not shown it has suffered an irreparable injury or that remedies available at law are inadequate to compensate for its injury.” *Microsoft Corp. v. Motorola Inc.*, No. C10-1823JLR, 2012 WL 5993202, at *7 (W.D. Wash. Nov. 30, 2012).

129. However, when enjoining Motorola from enforcing their German injunction against Microsoft, Judge Robart stated that the district court’s preliminary injunction would remain in effect until the court was “able to determine whether injunctive relief is an appropriate remedy for Motorola to seek with respect to Microsoft’s alleged infringement of Motorola’s standard essential patents.” *Microsoft Corp. v. Motorola, Inc.*, 871 F. Supp. 2d 1089, 1100, 1104 (W.D. Wash. 2012).

issue presented was whether an SEP holder filing a Section 337 action—an exclusion order—at the ITC against an implementer is a per se breach of the SEP holder’s RAND commitment.¹³⁰ Realtek sought an order prohibiting LSI from enforcing or seeking to enforce any exclusion or injunction that the ITC might issue with respect to SEPs pending a full “RAND trial” on the merits.¹³¹ The court held that the act of seeking injunctive relief before proposing a RAND license was “inherently inconsistent and a breach of the defendants’ promise to license the patent on RAND terms.”¹³² Invoking the *eBay* factors, the court noted that a “RAND royalty would be adequate compensation for any injury [LSI] has suffered as a result of Realtek’s allegedly infringing conduct.”¹³³ Additionally, the court noted that Realtek was harmed because the threat of an exclusion order gives the SEP holder inherent undue bargaining power in any negotiations that take place.¹³⁴

In *Apple, Inc. v. Motorola, Inc.*, Judge Posner considered the appropriateness of injunctive relief in the RAND context and determined that “the court would not be justified in enjoining Apple from infringing unless Apple refuses to pay a royalty that meets the [RAND] requirement.”¹³⁵ Finally, in *In re Innovatio IP Ventures*, the court did not take a position on injunctive relief but noted that its removal as an available remedy would not unduly burden the SEP holders, as they voluntarily made the RAND commitment.¹³⁶ Although there is not yet a judicial consensus on the propriety of injunctive relief in the RAND context, it is increasingly disfavored. In *Realtek*, an ITC exclusion order itself triggered the breach of contract, resulting in the court holding that seeking an exclusion order in the ITC prior to offering a RAND royalty rate is a per se breach of contract.¹³⁷ The view that injunctive relief is inconsistent with the RAND commitment makes seeking injunctive relief a harm that an implementer can then bring a breach of contract action to remedy.

130. *Realtek Semiconductor Corp. v. LSI Corp.*, 946 F. Supp. 2d 998, 1000–01 (N.D. Cal. 2013).

131. *Id.* at 1001.

132. *Id.* at 1006.

133. *Id.* at 1007.

134. *Id.*; see also U.S. DEPT. OF JUSTICE & U.S. PATENT & TRADEMARK OFFICE, JOINT POLICY STATEMENT ON REMEDIES FOR STANDARDS-ESSENTIAL PATENTS SUBJECT TO VOLUNTARY F/RAND COMMITMENTS 6 (2013), available at http://www.uspto.gov/about/offices/ogc/Final_DOJ-PTO_Policy_Statement_on_FRAND_SEPs_1-8-13.pdf.

135. *Apple, Inc. v. Motorola, Inc.*, 869 F. Supp. 2d 901, 2012 (N.D. Ill. 2012).

136. *In re Innovatio IP Ventures, LLC Patent Litig.*, MDL 2303, 2013 WL 5593609, at *11 (N.D. Ill. Oct. 3, 2013).

137. *Realtek*, 946 F. Supp. 2d at 1010.

F. CONCLUSION

The lack of an enforcement mechanism for the RAND commitment made the emergence of contract law into SEP litigation inevitable. Alternatives to contract law have been proposed as possible solutions to the problem of SEP litigation, but these alternatives often involve significant policy shifts or the cooperation of standard-setting organizations.¹³⁸ The reality of the current legal field, where SEP cases abound, requires a more immediate roadmap. Recent judicial rulings holding that (1) the RAND commitment is a valid contract, (2) implementers are third-party beneficiaries, (3) the introduction of the duty of good faith and fair dealing is a contractual standard in the RAND commitment, and (4) injunctive relief is incompatible in the RAND context, make contract law an attractive enforcement mechanism. However, questions still remain as to what a reasonable royalty actually is, how is it determined, and by whom it is determined. Emerging answers to these remaining questions will be discussed in Part III.

III. THE DETERMINATION OF REASONABLE: THE MICROSOFT METHOD

As Mark Lemley has noted, “While reasonable and nondiscriminatory licensing thus appears to be the majority rule among SSOs with a patent policy, relatively few SSOs gave much explanation of what those terms mean or how licensing disputes would be resolved.”¹³⁹ In fact, many prominent SSOs explicitly deny responsibility in answering these questions.¹⁴⁰ And it is these questions as to the meaning of “reasonable” that are currently before federal judges.

Despite years of academic and professional debate on what constitutes reasonable terms, there had never been a judicially determined RAND royalty rate.¹⁴¹ Judge Robart’s RAND rate determination in *Microsoft* was the first of its kind.¹⁴² His methodology is detailed, but familiar. It utilizes the *Georgia-*

138. These alternatives will be explored more fully in Section IV.A, *infra*.

139. Lemley, *supra* note 7, at 1906.

140. *See, e.g.*, IEEE BYLAWS, *supra* note 42, § 6.2 (“The IEEE is not responsible for determining whether any licensing terms or conditions provided . . . in any licensing agreements are reasonable or nondiscriminatory.”).

141. *See, e.g.*, Lichtman, *supra* note 48.

142. *Microsoft Corp. v. Motorola, Inc.*, No. C10-1823JLR, 2013 U.S. Dist. LEXIS 60233 (W.D. Wash. Apr. 25, 2013).

Pacific factors used in patent damages calculations,¹⁴³ modifying them to specifically address SEP and RAND contexts and concerns.¹⁴⁴ This Part examines how the contractual analysis in *Microsoft* formulated the issue of reasonableness in a RAND license. It also examines Judge Robart's method of calculation and the subsequent RAND royalty rate calculation in *In re Innovatio*. Finally, this Part argues that although judicially determined RAND rates are not ideal, the availability of their determination in a contractual analysis provides a necessary remedy for the RAND commitment.

A. MICROSOFT V. MOTOROLA AND REFORMULATING REASONABLE

The *Microsoft* litigation began with an assertion that offers to license had to be made on RAND terms.¹⁴⁵ Microsoft alleged that Motorola's offer letters breached Motorola's RAND commitments to the IEEE and ITU by (1) requesting a royalty rate that resulted in "blatantly unreasonable" cash payments and (2) applying a "blatantly unreasonable" base—the sale price of Xboxes, computers, and smartphones running Windows.¹⁴⁶ However, Motorola argued that its RAND commitments only required Motorola to *issue* licenses on RAND terms, not make initial offers on RAND terms.¹⁴⁷

The court found that the language of Motorola's LOAs to the IEEE and declarations to the ITU focused on a *resulting* RAND license.¹⁴⁸ The court reasoned that the policies of the IEEE and ITU, by stating that "[n]egotiations are left to the parties concerned,"¹⁴⁹ envision a negotiation between the parties resulting in a RAND license.¹⁵⁰ Because of this anticipated negotiation, it "logically does not follow that initial offers must be on RAND terms."¹⁵¹ Critical to the court's determination was that if the court did not know what the RAND rate in the case was, how could the parties know what was reasonable at the time of offer?¹⁵²

143. *See* *Georgia-Pacific Corp. v. U.S. Plywood Corp.*, 318 F. Supp. 1116 (S.D.N.Y. 1970).

144. *Microsoft*, 2013 U.S. Dist. LEXIS 60233, at *54–65.

145. *Microsoft Corp. v. Motorola, Inc.*, 696 F.3d 872, 879 (9th Cir. 2012) (discussing the injunctive relief granted to Motorola by the German courts).

146. *Microsoft Corp. v. Motorola Inc.*, 864 F. Supp. 2d 1023, 1036 (W.D. Wash. 2012).

147. *Id.* at 1037.

148. *Id.*

149. *ITU Common Patent Policy*, *supra* note 23.

150. *Microsoft*, 864 F. Supp. 2d at 1037.

151. *Id.* at 1038.

152. *Id.* Additionally, if courts required offers to be made on RAND terms, this would frustrate the purpose of ensuring broad access to SEPs and widespread adoption of standards. Patent holders would be disincentivized from participating in the standards

However, this interpretation did not entitle Motorola make blatantly unreasonable offers. The court held that SEP holders must comport with “the implied duty of good faith and fair dealing inherent in every contract,”¹⁵³ and that before a jury could decide whether Motorola’s licensing offers breached the duty of good faith, the court would “need to determine a true RAND royalty rate for purposes of comparison.”¹⁵⁴ In order to accomplish this, a bench trial was held to determine a RAND range and specific rate for Motorola’s SEPs in the 802.11 and H.264 Standards.¹⁵⁵

B. REACHING A REASONABLE RATE IN MICROSOFT

Following the bench trial, Judge Robart set forth a methodology for determining a RAND royalty rate and range. The methodology adopts a modified version of the *Georgia-Pacific* factors in order to recreate a hypothetical negotiation between an SEP holder and an implementer.¹⁵⁶ The *Microsoft* framework has two central considerations in its analysis: in a hypothetical negotiation the parties would set RAND royalty rates by evaluating (1) the importance of the SEPs to the standard, and (2) the importance of the standard and the SEPs to the products at issue.¹⁵⁷

The importance of the SEPs to the standard and the importance of the standard and the SEPs to the products at issue define a “reasonable” rate. Judge Robart also outlined “economic guideposts for assessing RAND terms,” stating that (1) creating a RAND rate should take into consideration and seek to mitigate patent holdup and royalty stacking, (2) that a reasonable royalty should be limited to the value of the patented technology *apart* from the value associated with incorporation into the standard and, (3) that the SEP holder should receive a reasonable return on its investment.¹⁵⁸ These economic guideposts reduce the problem of outrageously high RAND royalty demands by anchoring the RAND rate to the value of the contribution rather than the holdup value.

process for fear that they would be required to make reasonable offers or risk being sued for breach of contract.

153. *Microsoft*, 864 F. Supp. 2d at 1038.

154. *Microsoft Corp. v. Motorola, Inc.*, No. C10-1823JLR, 2012 WL 5993202, at *4 (W.D. Wash. Nov. 30, 2012).

155. *Microsoft Corp. v. Motorola, Inc.*, No. C10-1823JLR, 2013 U.S. Dist. LEXIS 60233 (W.D. Wash. Apr. 25, 2013).

156. *See Georgia-Pacific Corp. v. U.S. Plywood Corp.*, 318 F. Supp. 1116 (S.D.N.Y. 1970).

157. *Microsoft*, 2013 U.S. Dist. LEXIS 60233, at *44.

158. *Id.* at *43–44.

Judge Robart incorporated the economic guideposts into a hypothetical bilateral negotiation.¹⁵⁹ The court noted that this framework was preferable because bilateral negotiations are typical for most RAND negotiations, and because this framework was used in *Georgia-Pacific*.¹⁶⁰

1. *A New Formulation of the Georgia-Pacific Factors*

As there had never been a judicially determined RAND royalty prior to *Microsoft*, there was no pre-existing framework with which to calculate a RAND royalty rate. The widely accepted use of the *Georgia-Pacific* factors to calculate patent royalties seemed a natural place to begin.¹⁶¹ The court, however, noted critical differences between the *Georgia-Pacific* context and the RAND context.¹⁶² First, where in the *Georgia-Pacific* framework the patent holder has monopoly power over its patent and may choose to withhold licensing, the SEP holder is under contractual obligation to license.¹⁶³ Second, in any negotiation, the implementer knows it will need to take a license from many SEP owners, rather than just a single owner.¹⁶⁴ In light of these differences, Judge Robart modified the *Georgia-Pacific* factors to the RAND context, emphasizing contribution over market value.¹⁶⁵

159. *Id.* at *48. The court rejected Microsoft's multilateral hypothetical negotiation approach that framed the economic value of the patent as the incremental value of the technology compared to the alternatives that could have been written into the standard. *Id.* at *44. The court stated that Microsoft's approach lacked real-world applicability and cited the difficulty courts would face in trying to determine the incremental value for multi-patent standards. *Id.* at *44–46. The court did state that determining the value of the patent requires consideration of the importance and contribution of the patent to the standard. Any alternatives available to the patented technology that would have provided the same or similar technical contribution to the standard would help frame the actual value of the patent at issue. In this way, incremental value is a useful consideration. *Id.* at *46.

160. *Id.* at *50–51.

161. *See* *LaserDynamics, Inc. v. Quanta Computer, Inc.*, 694 F.3d 51, 60 n.2 (Fed. Cir. 2012) (stating that the use of the *Georgia-Pacific* factors to “frame the reasonable royalty inquiry . . . properly tie[s] the reasonable royalty calculation to the facts of the hypothetical negotiation at issue”); *see also* Anne Layne-Farrar et al., *Pricing Patents for Licensing in Standard Setting Organizations: Making Sense of FRAND Commitments*, 74 ANTITRUST L. J. 671, 673–81 (2007) (arguing that courts seeking to evaluate what behavior is consistent with the FRAND commitments can extend the *Georgia-Pacific* factors, most of which are directly applicable to FRAND evaluations).

162. *Microsoft Corp. v. Motorola, Inc.*, No. C10-1823JLR, 2013 U.S. Dist. LEXIS 60233, at *53 (W.D. Wash. Apr. 25, 2013).

163. *Id.*

164. *Id.*

165. *Id.* at *54–65.

2. *The Microsoft Modifications*¹⁶⁶

<i>Georgia-Pacific</i> Factors	<i>Microsoft</i> Factors
1. The royalties received by the patentee for the licensing of the patent in suit, proving or tending to prove an established royalty.	1. To prove an established royalty rate for an SEP, the past royalty rates for a patent must be negotiated under a RAND, or comparable, negotiation; licensing agreements, such as patent pools, will be relevant.
2. The rates paid by the licensee for the use of other patents comparable to the patent in suit.	2. The rates paid by the licensee for the use of other patents comparable to the patent in suit.
3. The nature and scope of the license.	3. The nature and scope of the license.
4. The licensor's established policy and marketing program to maintain his patent monopoly by not licensing others to use the invention or by granting licenses under special conditions to preserve that monopoly.	4. Inapplicable because the licensor has made a commitment to license on RAND terms and may no longer maintain a patent monopoly; an SEP owner must grant licenses on RAND terms to all implementers of the standard.
5. The commercial relationship between the licensor and licensee, such as, whether they are competitors in the same territory in the same line of business, or whether they are inventor and promoter.	5. Inapplicable because having committed to license on RAND terms, the patentee may no longer discriminate against its competitors; the patentee must license to all implementers on reasonable terms.
6. The effect of selling the patented specialty in promoting sales of other products of the licensee; the existing value of the invention to the licensor as a generator of sales of his non-patented items; and the extent of such derivative or convoyed sales.	6. The contribution of the patent to the technical capabilities of the standard and also the contribution of those relevant technological capabilities to the implementer and the implementer's products.
7. The duration of the patent and the term of the license.	7. The term of the license is the term of the patent so this factor has little influence on a reasonable royalty rate.
8. The established profitability of the product made under the patent, its commercial success, and its current popularity.	8. Same considerations as <i>Microsoft</i> factor 6.

166. This chart is compiled for brevity's sake. For Judge Robart's full discussion of the factors, see *id.*

9. The utility and advantages of the patent property over the old modes or devices, if any, that had been used for working out similar results.	9. Alternatives that could have been written into the standard instead of the patented technology during the period before the standard was adopted and implemented. ¹⁶⁷
10. The nature of the patented invention, the character of the commercial embodiment of it as owned and produced by the licensor, and the benefits to those who have used the invention.	10. Contribution of the patent to the technical capabilities of the standard and the contribution of those relevant technical capabilities to the implementer's products, keeping the value of the technology separate from the value associated with incorporation into the standard; evidence of the benefit and value of the patent to the owner and implementer is relevant to the capability of the standard and contribution of the standard to the implementer.
11. The extent to which the infringer has made use of the invention, and any evidence probative of the value of that use.	11. Same considerations as <i>Microsoft</i> factor 10.
12. The portion of the profit or of the selling price that may be customary in the particular business or in comparable businesses to allow for the use of the invention or analogous inventions.	12. The customary practices of businesses licensing RAND-committed patents; licensing fees for non-RAND-committed patents customary in the business industry cannot form the basis of comparison.
13. The portion of the realizable profit that should be credited to the invention as distinguished from non-patented elements, the manufacturing process, business risks, or significant features or improvements added by the infringer.	13. Contribution of the patented technology apart from the value of the patent as a result of its incorporation into the standard.
14. The opinion testimony of qualified experts.	14. The opinion testimony of qualified experts.
15. The amount that a licensor and licensee would have agreed upon (at the time the infringement began) if both had been reasonably and voluntarily trying to reach an agreement.	15. The SEP owner's obligation to license its SEPs on RAND terms, which necessarily must abide by the purpose of the RAND commitment of widespread adoption of the standard through the avoidance of holdup and stacking.

The RAND-based modifications made to the *Georgia-Pacific* factors (hereinafter "*Microsoft* factors") focus heavily on the contribution of the SEPs to the standard, and on the importance of the standard and the SEPs to the

167. This factor is an incremental valuation. See *supra* note 159 and accompanying text.

products at issue.¹⁶⁸ *Microsoft* factors 6, 8, 10, 11, and 13 are all focused on the contribution of the SEP to the standard.¹⁶⁹ As such, they weigh heavily in the court's determination of the RAND rates and ranges set for Motorola's SEPs pertaining to the H.264 and 802.11 Standards.

3. *Valuation of Motorola's SEPs Relating to the H.264 Standard*

There are over 2,500 patents essential to the H.264 Standard.¹⁷⁰ The standard is used for video compression, the process by which video data is formatted to require less memory.¹⁷¹ Video compression is important due to the massive data storage capacity necessary for modern digital video.¹⁷² A video compression standard defines many different coding tools used for different purposes, each of which contributes a small amount to the compression of the video.¹⁷³ Fourteen of Motorola's sixteen patents incorporated in the H.264 Standard relate almost entirely to "interlaced video," a compression technology surpassed by "progressive video" and rarely used in modern technology or Microsoft products.¹⁷⁴ In light of the vast majority of Motorola's patents being irrelevant to Microsoft's products at issue, the court set the RAND royalty rate for Motorola's H.264 SEP portfolio set at a mere 0.555 cents per unit.¹⁷⁵ The court also determined that a RAND royalty range for Motorola's H.264 SEP portfolio had an upper bound of 16.389 cents per unit and a lower bound of 0.555 cents per unit.¹⁷⁶

These figures were calculated using the MPEG LA H.264 patent pool (*Microsoft* factor 1).¹⁷⁷ Patent pools are created to facilitate the licensing of SEPs to third-party licensees by eliminating the need to negotiate individually with different SEP owners.¹⁷⁸ Instead, the pools gather all the necessary SEPs in a single licensing package for third-party implementers.¹⁷⁹ Patent pools distribute royalties on a per patent basis as part of a patent-counting system.¹⁸⁰ Once the terms of a patent pool are set, a potential licensor cannot

168. *Microsoft*, 2013 U.S. Dist. LEXIS 60233, at *54–65.

169. *Id.*

170. *Id.* at *80.

171. *Id.* at *66.

172. *Id.*

173. *Id.*

174. *Id.* at *68–69, 83.

175. *Id.* at *20.

176. *Id.* at *20.

177. *Id.* at *239–42.

178. *Id.* at *217.

179. *Id.*

180. *Id.* at *218.

go to the pool and renegotiate the deal.¹⁸¹ As a result, fundamental or broad patents are given the equivalent value as weak or narrow patents.¹⁸² Patent pools are imperfect models because they tend to produce lower rates than those produced through bilateral negotiations, do not use the incremental value approach of *Microsoft* factor 9, and carry policy concerns of disincentivizing participation in standard setting.¹⁸³ Therefore the court concluded that the MPEG LA H.264 patent pool cannot itself dictate the RAND royalty rate, but it can serve as an indicator of a royalty rate that falls within a RAND range.¹⁸⁴

The calculation started by estimating the amount Microsoft would pay if Motorola received royalties equivalent to what it would receive if Motorola's and other H.264 SEP holders' SEPs were all added to the pool at the current pool rate structure.¹⁸⁵ Under this scenario, Microsoft would pay 0.185 cents per unit.¹⁸⁶ Because the royalty rate Motorola would receive under the patent pool represents only a portion of the value Motorola would receive as a member of the patent pool (the value to Motorola of having full access to the other technologies within the patent pool), and because Microsoft (also a member of the MPEG LA H.264 patent pool) pays twice as much *for* licensing from the pool as it receives *from* licensing, the court concluded that Microsoft valued membership in the MPEG LA H.264 pool as twice the value of the royalty rates it received.¹⁸⁷ The court concluded that the valuation for Motorola's H.264 SEP portfolio is:¹⁸⁸

$$0.185 \frac{\text{cents}}{\text{unit}} + \left(2 \times .185 \frac{\text{cents}}{\text{unit}} \right) = .555 \frac{\text{cents}}{\text{unit}}$$

The court then calculated the upper bound of the RAND royalty rate for Microsoft's H.264 SEP portfolio. The primary *Microsoft* factor in calculating the upper bound is factor 15: "The anti-stacking principle constrains RAND because parties in a RAND negotiation would determine a reasonable royalty by considering how much in total license fees the implementer can pay

181. *Id.* at *219.

182. *Id.*

183. *Id.* at *231–38.

184. *Id.* at *239.

185. *Id.* at *244.

186. *Id.* at *245.

187. *Id.* at *246–47.

188. *Id.* at *259. This amount represents the low end of the range of a RAND royalty rate for Motorola's H.264 SEP portfolio. *Id.* at *255.

before implementation of the standard becomes cost-prohibitive.”¹⁸⁹ The court found the highest fee discussed during formation of the MPEG LA H.264 patent pool—an uncapped 150 cents per unit price—to be best evidence of the high point of customary businesses licensing of the RAND-committed patents (*Microsoft* factor 12).¹⁹⁰ Based on the pro rata share of Motorola’s SEP portfolio, Motorola’s SEPs contribute a value of 5.463 cents to each unit, which is valued in total at 150 cents per unit.¹⁹¹ As the court earlier determined that Motorola’s membership in the patent pool and access to the technology within is twice the amount of royalties received, the court determined that the upper bound of a RAND royalty for Motorola’s SEP portfolio is:¹⁹²

$$5.463 \frac{\text{cents}}{\text{unit}} + \left(2 \times 5.463 \frac{\text{cents}}{\text{unit}} \right) = 16.389 \frac{\text{cents}}{\text{unit}}$$

The court found that, based on Motorola’s technology represented in the H.264 Standard, there would be no reason to set the value at a higher amount.¹⁹³ This conclusion is due to *Microsoft* factors 6, 8, 9, 10, and 11.¹⁹⁴ The court examined closely the importance of each of Motorola’s H.264 SEPs and found that, “although some of the patents contributed to the H.264 Standard, others provided only minimal contribution due to the availability of alternative technology.”¹⁹⁵ Additionally, fourteen of Motorola’s sixteen patents covered interlaced video compression, a technology that the court determined was not overly important to Microsoft products utilizing the H.264 Standard.¹⁹⁶ And of the two remaining Motorola SEPs, Microsoft products only implemented one.¹⁹⁷ In other words, Motorola’s H.264 SEPs contributed minimally to the standard and the standard contributed minimally to Microsoft’s products.

4. *Valuation of Motorola’s SEPs Relating to the 802.11 Standard*

The 802.11 Standard is a Wi-Fi standard. The standard allows companies to build products to a set of specifications for wireless local area

189. *Id.* at *260.

190. *Id.* at *261.

191. *Id.* at *262.

192. *Id.*

193. *Id.* at *248.

194. *Id.* at *54–65.

195. *Id.* at *257.

196. *Id.*

197. *Id.* at *257.

networking.¹⁹⁸ The court noted that the 802.11 Standard is the de facto standard for wireless home networks.¹⁹⁹ There are currently estimated to be thousands of patents essential to the 802.11 Standard.²⁰⁰ The court noted that Motorola presented only “scant evidence that its patents are essential to the 802.11 Standard.”²⁰¹ Due the scarcity of evidence, the court diminished their value and evaluated the importance of Motorola’s 802.11 SEPs only in relation to the one Microsoft product that Motorola alleged used the pertinent patent—the Xbox.²⁰² Ultimately, the court determined the RAND royalty rate for Motorola’s 802.11 SEP portfolio at 3.471 cents per unit.²⁰³ The court set the upper bound of a RAND royalty range at 19.5 cents per unit and the lower bound at 0.8 cents per unit.²⁰⁴ The set rate and upper RAND rate is applicable to Microsoft’s Xbox sales. However, for all other Microsoft products, the lower bound of 0.8 cents per unit would be used.²⁰⁵

Pursuant to *Microsoft* factor 12, the court considered three possible indicators for the RAND rate and range for Motorola’s 802.11 SEPs.²⁰⁶ The first was the Via 802.11 patent pool.²⁰⁷ The court noted that, like in the RAND royalty rate and range determination for the H.264 Standard, membership in the patent pool would provide value to Motorola of twice the royalties it would receive from the pool, thus alleviating concern of under-compensating SEP holders for their technology and participation in patent pools.²⁰⁸ The court’s pro rata determination of Motorola’s SEPs within the Via 802.11 patent pool was 2.038 cents per unit.²⁰⁹ Increasing the value due to Motorola’s membership in the pool amounts equals:²¹⁰

$$2.038 \frac{\text{cents}}{\text{unit}} + \left(2 \times 2.038 \frac{\text{cents}}{\text{unit}} \right) = 6.114 \frac{\text{cents}}{\text{unit}}$$

198. *Id.* at *140.

199. *Id.*

200. *Id.* at *274.

201. *Id.* at *152.

202. *Id.* at *152–53.

203. *Id.* at *20.

204. *Id.*

205. *Id.*

206. *Id.* at *294.

207. *Id.* at *268 (stating that “the Via Licensing 802.11 patent pool is an indicator of a RAND royalty rate for Motorola’s 802.11 SEP portfolio, albeit not as strong an indicator as the MPEG LA H.264 patent pool”).

208. *Id.* at *269. For discussion of the H.264 patent pool’s effect on valuation, see *supra* notes 177–90 and accompanying text.

209. *Id.* at *274.

210. *Id.*

The second indicator was the Marvell Wi-Fi Chip. Microsoft currently pays just under \$3 per Marvell chip to provide 802.11 functionality to the Xbox.²¹¹ The Marvell chip is the smallest salable unit that implements the standard.²¹² Marvell pays a one percent royalty rate and licensing fee on the chip for software and design help in creating embedded microprocessors,²¹³ resulting in a calculation of:

$$.01 \times 3000 \frac{\text{cents}}{\text{unit}} = 3 \frac{\text{cents}}{\text{unit}}$$

The court held that although one percent is a high benchmark, under *Microsoft* factor 12, the Marvell chip is an indicator of a RAND rate for Motorola's 802.11 SEP portfolio, resulting in an estimate of three cents per chip.²¹⁴

The third indicator was the InteCap Analysis.²¹⁵ InteCap specialized in valuing patent portfolios for the purpose of maximizing royalty income through the monetization of patents.²¹⁶ InteCap's analysis amounted to 0.1 percent of the end product price of implementing products, which would result in twenty cents to forty cents per Xbox, which are typically sold for \$200 to \$400 per unit.²¹⁷ However, the court did note that the InteCap Analysis overemphasized the importance of Motorola's 802.11 SEPs, and therefore parties in a negotiation would consider it less important than the Via 802.11 Licensing Pool and the Marvell Wi-Fi chip.²¹⁸ Accordingly, the RAND royalty rate using the InteCap Analysis was diminished by a factor of twenty-five, producing a royalty rate between 0.8 and 1.6 cents per unit.²¹⁹

$$\frac{1}{25} \left(.001 \times 20000 \frac{\text{cents}}{\text{unit}} \right) = .8 \frac{\text{cents}}{\text{unit}}$$

211. *Id.* at *279.

212. *Id.* at *278–79. The Federal Circuit held that, in a situation where small elements of a multicomponent product are accused of infringement, “it is generally required that royalties be based not on the entire product, but instead on the ‘smallest salable patent-practicing unit.’” *See LaserDynamics, Inc. v. Quanta Computer, Inc.*, 694 F.3d 51, 67 (Fed. Cir. 2012).

213. *Microsoft*, 2013 U.S. Dist. LEXIS 60233, at *279.

214. *Id.* at *283.

215. *Id.* at *288–92.

216. *Id.* at *284.

217. *Id.* at *287.

218. *Id.* at *292.

219. *Id.* at *293.

$$\frac{1}{25} \left(.001 \times 40000 \frac{\text{cents}}{\text{unit}} \right) \equiv 1.6 \frac{\text{cents}}{\text{unit}}$$

The upper range was calculated similar to the upper range for the H.264 Standard (keeping in mind *Microsoft* factor 15).²²⁰ The court took the highest royalty range offered by Microsoft in trial, 6.5 cents per unit based on the Via Licensing Pool, and increased it to account for added value due to membership in the pool.²²¹ Accordingly, the upper range was calculated at:²²²

$$6.5 \frac{\text{cents}}{\text{unit}} + \left(2 \times 6.5 \frac{\text{cents}}{\text{unit}} \right) = 19.5 \frac{\text{cents}}{\text{unit}}$$

The court then chose the lower bound as 0.08 cents per unit, based on the InteCap evaluation, since there was little evidence within the record to determine a lower bound.²²³

Ultimately, the court set the RAND royalty rate at the average of the three estimates produced by the indicators, with some adjustments.²²⁴ The court used the low point of the InteCap evaluation, 0.8 cents per unit, because it was based on the end-price of products rather than the importance of the SEP to the standard and the importance of the standard and the SEP to the product.²²⁵ The court also split the range the Marvell chip produced to a figure of 3.5 cents per unit.²²⁶ The final estimate was from the Via Patent Pool, 6.114 cents per unit. The average of the three estimates was 3.471 cents per unit.²²⁷

$$\frac{1}{3} \left(0.8 \frac{\text{cents}}{\text{unit}} + 3.5 \frac{\text{cents}}{\text{unit}} + 6.114 \frac{\text{cents}}{\text{unit}} \right) = 3.471 \frac{\text{cents}}{\text{unit}}$$

Judge Robart's method is a very thorough framework for calculating RAND royalty rates and range. It is the first of its kind and imports a familiar damages calculation framework while customizing it to the purposes and

220. *Id.* at *298–301.

221. *Id.*

222. *Id.*

223. *Id.* at *301–02.

224. *Id.* at *296–97.

225. *Id.* at *296.

226. *Id.*

227. *Id.* at *296–97.

policy concerns of the RAND commitment. As such, the *Microsoft* framework was heavily referenced in the second judicially created RAND rate.

C. MODIFYING THE MICROSOFT FRAMEWORK: JUDGE HOLDERMAN'S TAKE

On October 3, 2013, the Northern District of Illinois created the second judicially determined RAND rate in *In re Innovatio IP Ventures, LLC Patent Litigation* (“*Innovatio*”).²²⁸ *Innovatio* IP Ventures brought multiple suits alleging infringement of its SEPs related to the 802.11 Wi-Fi Standard against various implementers, which were then coalesced into a multi-district litigation case.²²⁹ In *Innovatio*, the parties agreed to apply Judge Robart’s framework, with a few modifications, to the circumstances of the case.²³⁰

First, Judge Holderman stated that for this particular case, the purpose of the RAND determination was not for a jury to use to decide if a breach of contract had occurred.²³¹ Instead, the RAND determination in *Innovatio* was used to set damages for infringement of SEPs, and therefore only a single RAND rate would be set, rather than a range.²³² Next, because the court in *Innovatio* had already determined the essentiality of the SEPs, it did not adjust the RAND rate based upon pre-litigation uncertainty concerning the essentiality of a given patent.²³³ Finally, the court determined that the appropriate royalty base for the determination was the Wi-Fi chip, the smallest saleable unit that implemented the 802.11 Standard.²³⁴ The court noted that determining the importance of *Innovatio*’s SEPs to the 802.11 Standard effectively determines the importance of the SEPs to the Wi-Fi chip, as the sole purpose of the chip is to provide Wi-Fi functionality.²³⁵ In this regard, the court merged the two central considerations of Judge Robart’s methodology and only evaluated the importance of *Innovatio*’s SEPs to the 802.11 Standard.²³⁶

228. *In re Innovatio IP Ventures, LLC Patent Litig.*, MDL 2303, 2013 U.S. Dist. LEXIS 144061 (N.D. Ill. Oct. 3, 2013).

229. *Id.* at *38.

230. *Id.* at *50–51.

231. *Id.* at *56.

232. *Id.*

233. *Id.* at *56–59. In *Microsoft*, the calculation was based on a hypothetical negotiation in which the essentiality of Motorola’s SEPs would not have yet been judicially determined, and therefore the RAND rate was adjusted to account for skepticism regarding essentiality. *Id.* at *152.

234. *Id.* at *60.

235. *Id.*

236. *Id.*

In looking for indicators for the RAND rate, Judge Holderman looked at ex ante alternatives to the patented technology pursuant to *Microsoft* factor 9.²³⁷ The manufacturers argued that if two patented and equally effective alternatives charge the same royalty rate, the price would effectively be negotiated down to zero.²³⁸ Innovatio argued, and Judge Holderman agreed, that no patent holder would accept a royalty that is effectively zero because innovators must be compensated for their investment.²³⁹ Accordingly, the court considered alternative technology but recognized that alternatives considered by the standard would not drive down price as much as alternative technology in the public domain.²⁴⁰ Ultimately the court found that none of the alternatives presented would have provided all of the flexibility and functionality that Innovatio's SEPs provided to the 802.11 Standard.²⁴¹

Pursuant to *Microsoft* factors 1 and 2, the court examined other licenses offered by Innovatio but ultimately determined that none were sufficiently comparable.²⁴² The licenses offered suffered from many of the same problems that those in *Microsoft* suffered from.²⁴³ Innovatio's proposed licenses were often part of a larger settlement negotiation between parties, were adopted under the duress of litigation, or were non-RAND licenses—all of which meant that the licenses were not negotiated with the understanding of the goals of the RAND commitment in mind.²⁴⁴

Without comparable licenses, alternative technologies, or a useful patent pool,²⁴⁵ the court adopted a “top down” approach as the best approximation of the RAND rate the parties would have likely agreed upon before Innovatio's patents were adopted into the standard.²⁴⁶ This approach started

237. *Id.* at *100.

238. *Id.* at *101.

239. *Id.* at *101–02.

240. *Id.* at *106.

241. *Id.* at *120.

242. *Id.* at *139–60.

243. *Id.* at * 196, *199, *204, *212.

244. *Id.* at *139–60.

245. The Via Patent Pool used in *Microsoft* was also rejected due to the fact that the pool only had five licensors, thirty-five patents, and eleven licensees. Additionally, the court noted that patent pools do not distinguish between the technical merit of the patents in the pool, which can cause patent holders with valuable patents to not participate in the pool. The court noted that ultimately Judge Robart, although using the pool, determined that it did not have much significance to the RAND rate. Since Innovatio's patent portfolio was held to be of moderate-to-high importance, the court deemed it inappropriate to use a patent pool. *Id.* at *155–59.

246. *Id.* at *163.

with the average price of a Wi-Fi chip.²⁴⁷ Next, the profit made on the chip was calculated in order to determine the income available with which the chipmaker can pay IP royalties. Profits of the chip were determined by subtracting the cost of manufacturing from the sale price.²⁴⁸ Then, the available profit was multiplied by a fraction calculated as the number of Innovatio's 802.11 SEPs (nineteen), divided by the total number of 802.11 SEPs.²⁴⁹ The court stated that focusing on the profits of the chip manufacturer, rather than the profit margins of the accused products, ensures that the same RAND rate charged to the chip manufacturer is charged to the implementers.²⁵⁰ Ensuring that the same RAND rate is charged to both the chip manufacturer and implementers in turn ensures that the RAND rate is both reasonable and nondiscriminatory and thereby alleviates concerns of undue leverage and royalty stacking.²⁵¹

Using the "top down" method of calculation, the court found that the parties would have agreed to an average chip price of \$14.85.²⁵² The chipmaker's profit margin on the Wi-Fi chip was determined at 12.1 percent.²⁵³ This leaves an average profit of 180 cents per chip.²⁵⁴ The total number of SEPs in the 802.11 Standard was estimated to be three thousand, though not all of those SEPs have had their essentiality judicially confirmed.²⁵⁵ Having determined the elements, the court then undertook the calculation. Taking the 180 cents of profit per chip, the court then multiplied that by eighty-four percent, the value attributable to the top ten percent of all 802.11 SEPs to get 151 cents per chip.²⁵⁶ The court then multiplied this by 19/300—the ratio of the contribution of Innovatio's SEPs to the 802.11 Standard—resulting in a calculation of:²⁵⁷

$$151 \frac{\text{cents}}{\text{unit}} \times \frac{19}{300} = 9.56 \frac{\text{cents}}{\text{unit}}$$

247. *Id.*

248. *Id.* at *163.

249. *Id.* at *164.

250. *Id.* at *164–66.

251. *Id.*

252. *Id.* at *176.

253. *Id.* at *177.

254. *Id.* at *182.

255. *Id.* at *180.

256. *Id.* at *183.

257. The number three hundred is used to determine the pro rata share of the value in the top ten percent of all 802.11 SEPs attributable to Innovatio's nineteen SEPs that were determined to be of moderate-to-high importance *Id.*

The result of 9.56 cents per Wi-Fi chip is well within the *Microsoft* range set by Judge Robart.²⁵⁸

D. CONCLUSION: THE RAND RATE AS A REMEDY

Although *Microsoft* and *Innovatio* are the only two judicially created RAND rates to date, they demonstrate that the determination of a RAND rate itself is an effective remedy to the RAND commitment. Although Microsoft had a source for damages to claim after Motorola sought injunctive relief in the German courts, Microsoft started its litigation asking for a RAND rate to be determined in light of unreasonable demands.²⁵⁹ That *Microsoft* used the RAND rate as a tool for the jury to determine if a breach of the duty of good faith and fair dealing occurred and *Innovatio* used it as a damages calculation speaks to the usefulness of a judicially determined RAND rate.

There is no doubt that RAND determinations are lengthy, expensive, and cumbersome for courts. And it is not ideal for courts to be flooded with requests for RAND determinations, either sincerely or as a negotiation tactic by implementers.²⁶⁰ However, the next Part, which discusses the use of contract law as an enforcement mechanism, provides guidelines for behavior to reduce such concerns.

IV. WHY CAN'T WE BE FRANDS? NAVIGATING THE CURRENT STATE OF THE LAW

The use of contract law as an enforcement mechanism, along with its implied duty of good faith and fair dealing, does seem to make the use of “FRAND” more appropriate: fair (dealing), reasonable, and nondiscriminatory. From the perspectives of both an implementer and an SEP holder, this Part discusses how to navigate the current state of the law. This Part will conclude by discussing some of the interesting alternatives to contract law enforcement that may become available in the future.

258. The court noted that, because the rate fell comfortably within the RAND range Judge Robart had determined for Motorola’s eleven SEPs, the *Innovatio* rate is clearly reasonable. *Id.* at *185.

259. *Microsoft Corp. v. Motorola, Inc.*, No. C10-1823JLR, 2012 U.S. Dist. LEXIS 146517, at *14 (W.D. Wash. Oct. 10, 2012).

260. This is due to the incredible amount of resources courts must use to determine RAND rates. For the purposes of illustration, Judge Robart’s calculation spanned 208 pages. *See Microsoft Corp. v. Motorola, Inc.*, No. C10-1823JLR, 2013 U.S. Dist. LEXIS 60233 (W.D. Wash. Apr. 25, 2013). Judge Holderman’s calculation, which simplified Judge Robart’s method, was still eighty-nine pages. *See In re Innovatio IP Ventures, LLC Patent Litig.*, MDL 2303, 2013 U.S. Dist. LEXIS 144061 (N.D. Ill. Oct. 3, 2013).

A. AT WHAT POINT DOES AN IMPLEMENTER USE THE ENFORCEMENT MECHANISM PROVIDED BY CONTRACT LAW?

Determining when an implementer is able to use contract law as an enforcement mechanism depends on whether an implementer is responding to an unreasonable offer letter or an infringement suit requesting injunctive relief (or a Section 337 investigation in the ITC).

1. *If Receiving an Unreasonable Offer Letter*

An offer letter from an SEP holder arrives that seems unreasonable—now what?²⁶¹ First, an implementer must determine if the offer letter is, in fact, unreasonable. How is that determination made? If the offer letter uses a percentage of an end product price, it has waded into “unreasonable” territory. As previously discussed, both courts in *Microsoft* and *Innovatio* took a skeptical view of using a percentage of the end product price as a royalty rate.²⁶² If the offer letter is actually unreasonable, is it *so* unreasonable that it breaches the duty of good faith and fair dealing? If yes, then the implementer now has a breach of contract action.²⁶³ However, the implementer must be willing to abide by the determined RAND rate.²⁶⁴

If the offer is not so unreasonable as to breach the duty of good faith and fair dealing, the implementer should negotiate. If the SEP holder is unresponsive to negotiation or unwilling to lower its unreasonable rate but has still not filed an infringement action, the implementer can consider filing an action for anticipatory breach of contract. However, the doctrine of anticipatory breach “requires a positive statement or action by the promisor indicating distinctly and unequivocally that he or she either will not or cannot substantially perform any of his contractual obligations.”²⁶⁵ Because

261. If the implementer receives a reasonable offer letter, it would either enter into a license, initiate negotiations to get an even better rate, or if doubting the validity of the patents, would bring an action for declaratory judgment challenging the validity of the patent. Any of these options are outside the scope of this Note.

262. *See supra* Part III.

263. If the implementer has not experienced damages thus far, it can plead for relief for nominal damages and a judicially determined RAND rate. *See Apple, Inc. v. Motorola Mobility, Inc.*, 886 F. Supp. 2d 1061 (W.D. Wis. 2012).

264. *See Apple, Inc. v. Motorola Mobility, Inc.*, 11-CV-178-BBC, 2012 WL 7989412 (W.D. Wis. Nov. 8, 2012). Judge Crabb dismissed Apple’s suit after Apple refused to agree to be bound by the judicially determined RAND rate; Judge Crabb stated that it would be inappropriate for a court to conduct a RAND trial merely to produce a negotiation tool. *Id.*

265. *Microsoft Corp. v. Motorola, Inc.*, 864 F. Supp. 2d 1023, 1036 (W.D. Wash. 2012). This standard is likely to make anticipatory breach difficult to prove unless negotiations have become so untenable that the implementer can prove that the SEP holder has effectively stated that it will not license on RAND terms by the course of its behavior.

anticipatory breach may be difficult to prove, the best course of action is to negotiate in good faith. If the SEP holder refuses to negotiate, a breach of contract action may be borne out of that refusal as the negotiation process is inherent to licensing on RAND terms and therefore likely a contractual obligation the SEP holder is required to perform.²⁶⁶

2. *If Responding to an Infringement Action*

If the implementer is responding to an infringement action, the main considerations are whether injunctive relief has been sought and where the infringement action has been brought. If the infringement action has been brought in district court, then the implementer can mount a RAND affirmative defense to either offset the possibility of injunctive relief or ask for a RAND determination for the damages calculation.²⁶⁷ It is important to note that the RAND commitment must be raised as an affirmative defense in this context.²⁶⁸ If an implementer waives the affirmative defense they will be precluded from raising the RAND commitment elsewhere during litigation.²⁶⁹

If the action is being brought in a foreign court or the ITC and injunctive relief has been either sought *or* granted, the duty of good faith and fair dealing has been breached, and the implementer can file a breach of contract suit in district court asking for the SEP holder to be enjoined from enforcing the injunction or exclusion order.²⁷⁰ Alternatively, the implementer can raise a RAND affirmative defense if the foreign court recognizes third-party beneficiaries. The implementer may also be able to raise a RAND affirmative defense in the ITC, but as yet there is no case law from the ITC on RAND contractual issues that indicate how such an analysis would be undertaken. Either way, a contractual analysis of RAND is best done in U.S. district

266. *See supra* Section II.B.

267. *See supra* Section II.E; *see also supra* Section III.C.

268. *See* *Wi-Lan, Inc. v. HTC Corp.*, No. 2:11-cv-00068-JRG, at *8 (E.D. Tex. Oct. 11, 2013) (stating that FRAND must be used as an affirmative defense and not simply a response to damages calculations).

269. *Id.*

270. *See* *Microsoft Corp. v. Motorola, Inc.*, 696 F.3d 872 (9th Cir. 2012) (affirming the district court's preliminary injunction to enjoin Motorola temporarily from enforcing a patent injunction that it obtained against Microsoft in Germany); *see also* *Realtek Semiconductor Corp. v. LSI Corp.*, at 1008 (N.D. Cal. Oct. 10, 2012) (filing for breach of contract in district court before the ITC had concluded the 337 Investigation or issued an exclusion order).

courts due to the precedent *eBay* set and the persuasive case law *Microsoft* and *ReakTek* have established.²⁷¹

Implementer response to an infringement action is perhaps the easiest scenario under the current state of law relating to the RAND commitment. Seeking injunctive relief prior to negotiations for a RAND rate provides an immediately actionable harm and triggers a contractual analysis widely accepted in district courts.²⁷² It is a more ambiguous question as to how a breach of contract analysis would result should RAND negotiations occur and fail prior to seeking injunctive relief. This situation may trigger a “reasonableness” analysis of the proffered royalty rate offers to determine if the SEP holder breached its duty of good faith and fair dealing by seeking injunctive relief or if the implementer was an unwilling licensee by refusing a RAND rate, thereby making injunctive relief appropriate.

B. HOW AN SEP HOLDER CAN AVOID OR MAKE MOOT A BREACH OF CONTRACT ACTION

As the majority of this Note has detailed how implementers can use contract law as an enforcement mechanism to the RAND commitment, it may be useful to examine how an SEP holder can receive the reasonable royalty rates they are entitled to without risking a RAND offense. This can be done in two primary ways: through the thoughtful crafting of an offer letter and refraining from seeking injunctive relief before a RAND rate has been offered.

1. *The Offer Letter: Avoiding a RAND Offense*

As *Microsoft* demonstrated, the offer letter can be an immediate source of trouble. True, the court in *Microsoft* held that there is a difference between a reasonable offer and a reasonable license (the latter being required but not the former).²⁷³ However, the offer cannot be so unreasonable as to breach the

271. *See generally* *Microsoft Corp. v. Motorola, Inc.*, No. C10-1823JLR, 2012 U.S. Dist. LEXIS 146517, at *25–30 (W.D. Wash. Oct. 10, 2012) (holding that the RAND commitment is an enforceable contractual obligation to which Microsoft is a third-party beneficiary); *Realtek Semiconductor Corp. v. LSI Corp.*, 946 F. Supp. 2d 998, 1010 (N.D. Cal. 2013) (holding that the defendants were contractually obligated to license on RAND terms to third-party beneficiary Realtek).

272. *See* *Apple, Inc. v. Motorola, Inc.*, 869 F. Supp. 2d 901, 2012 U.S. Dist. LEXIS 89960, 2012 WL 2376664, at *12 (N.D. Ill. June 22, 2012) (stating that the court would not “be justified in enjoining Apple from infringing, unless Apple refuses to pay a royalty that meets the FRAND requirement”); *Realtek Semiconductor Corp. v. LSI Corp.*, 946 F. Supp. 2d 998, 1010 (N.D. Cal. 2013) (stating that seeking injunctive relief before undertaking RAND negotiations is a per se breach of contract).

273. *See supra* Section III.A.

duty of good faith and fair dealing.²⁷⁴ How is that to be avoided? Primarily, the SEP holder should not use a percentage of the end-product price.²⁷⁵ The court in *Microsoft* criticized Motorola's calculation of a reasonable royalty based on 2.25 percent of the end-product price of implementing products.²⁷⁶

However, it is not required that the SEP holder actually produce a RAND offer, just an offer made in good faith. What does that mean? Under *Microsoft*, this means commercial tenability.²⁷⁷ The SEP holder can demonstrate that an offer falls within commercial viability by demonstrating that, in calculating the offered royalty rate, the issue of royalty stacking was considered and accounted for. As most multi-component products implement multiple standards that involve hundreds to thousands of SEPs, a percentage of the end-product price will almost never be appropriate. An option to address royalty stacking (*Microsoft* factor 15) is to turn to a percentage price per unit of the smallest salable part implementing the standard to which the SEPs relate. Alternatively, the SEP holder can establish that it had a good faith belief that the offer was commercially tenable by showing that its calculation took into consideration the value of its SEPs to the standard and the contribution of the standard and its SEPs to the products at issue. This showing aligns with *Microsoft* factors 6, 8, 10, 11, and 13.²⁷⁸ The offered rate is not required to be actually commercially tenable, but believed in good faith to be commercially tenable, from which negotiations would commence.²⁷⁹

274. *Microsoft Corp. v. Motorola, Inc.*, 864 F. Supp. 2d 1023, 1038 (W.D. Wash. 2012).

275. *See Microsoft Corp. v. Motorola, Inc.*, No. C10-1823JLR, 2013 U.S. Dist. LEXIS 60233, at *191–98 (W.D. Wash. Apr. 25, 2013).

276. *Id.*

277. *Microsoft*, 2013 U.S. Dist. LEXIS 60233, at *213–14.

278. *Id.* at *59–65.

279. Additionally and obviously, the parties must negotiate in good faith. Although the courts have not undertaken the question of procedural or substantive bad faith in negotiation or if there is an obligation to negotiate, the answer is not difficult to predict. Negotiation is discussed within the policies of the ITU in lieu of specifics of what constitutes a RAND rate. It is then logical to state that SEP holders have a contractual obligation to negotiate in good faith, as negotiation is inherent to the licensing. *See ITU Common Patent Policy*, *supra* note 23 (stating that negotiations are left to the parties); *see also Microsoft Corp. v. Motorola, Inc.*, 864 F. Supp. 2d 1023, 1031 (W.D. Wash. 2012) (rejecting Motorola's conception of the RAND commitment as a unilateral offer, which would not entail negotiation).

2. *Refraining from Injunctive Relief*

Rulings in *Microsoft* and *Realtek* generally foretell the end of injunctive relief as a remedy for SEP infringement litigation.²⁸⁰ Although this spells the end of a powerful negotiation and settlement tactic, it may not amount to that big of a loss. This is because, as previously discussed, seeking an injunctive relief can trigger a breach of the duty of good faith and fair dealing, thereby triggering either a breach of contract action or a RAND affirmative defense.²⁸¹ So removal of injunctive relief in the RAND context removes a cause of action or an affirmative defense for implementers.²⁸²

SEP holders still retain a great deal of negotiation power, as most implementers will not wish to go through the time and expense of litigating a full RAND case. Injunctive relief is a powerful motivator to litigate and has been a central cause of many of the recent decisions that more firmly constrain SEP holders' actions.²⁸³ Additionally, the use of injunctive relief in the RAND context has spurred increased public and political scrutiny of SEP litigation, resulting in a rarely used Presidential veto of an ITC decision and the possibility of the federal government becoming involved in the licensing of SEPs.²⁸⁴ Constraining the use of injunctive relief may be in the long-term interests of SEP holders.

It should be noted that even with current disapproval, injunctive relief has not been completely removed as a remedy. Timeliness of filing for injunctive relief is the primary factor of judicial disapproval. *Realtek* ruled that seeking injunctive relief *prior* to offering a RAND rate is a *per se* breach of contract.²⁸⁵ But the court specifically limited its holding to these facts,²⁸⁶ leaving open the possibility that injunctive relief may still be appropriate if an implementer has rejected a RAND rate.

280. *Microsoft Corp. v. Motorola, Inc.*, 696 F.3d 872, 885 (9th Cir. 2012) (intimating that injunctive relief is inconsistent with the RAND commitment); *Realtek Semiconductor Corp. v. LSI Corp.*, 946 F. Supp. 2d 998 (N.D. Cal. 2013).

281. *See supra* Sections II.E (discussing injunctive relief) and IV.A.2 (discussing responding to an infringement action).

282. *See supra* Section II.E (discussing injunctive relief).

283. *See, e.g., Microsoft*, 696 F.3d 872; *Realtek*, 946 F. Supp. 2d 998.

284. *See* Presidential Veto, *supra* note 74; *see also* The Innovation Act, H.R. 3309, 113th Cong. (2013) (giving the FTC authority to regulate unfair licensing demands). The bill has since passed the House and is up for debate in the Senate. Innovation Act, H.R. 3309, 113th Cong. (2013).

285. *Realtek*, 946 F. Supp. 2d at 1008.

286. *Id.* (“The court’s breach of contract holding is limited to the situation here, where defendants did not even attempt to offer a license . . .”).

3. *Ambiguous Territory: How to Moot a RAND Defense*

The rejection of a RAND rate raises the issue of an unwilling licensee. And finding an implementer to be an unwilling licensee may be the only way to eliminate a RAND affirmative defense. However, there is no judicially determined definition of what constitutes an unwilling licensee in the RAND context. Judge Robart's logic indicates that a licensee does not become willing when refusing an initial offer—after all, Microsoft's refusal of the initial offers was not a repudiation of its third-party beneficiary rights.²⁸⁷ However, if the initial offer is in fact reasonable, then perhaps a refusal may constitute unwillingness. That then begs the question of how an implementer is to know that the offer is reasonable, much like the question of how an SEP holder is to know an offer is unreasonable. And perhaps the answer to both is the same: commercial tenability.²⁸⁸

It is unclear if an implementer refusing to negotiate by not responding to attempts to negotiate constitutes unwillingness. On the one hand, is non-responsiveness a positive statement or action?²⁸⁹ If anything, non-responsiveness seems to be an absence of action. On the other hand, to *not* respond in a bilateral negotiation seems to quite clearly signal an unwillingness to substantially perform contractual duties. But third-party beneficiaries do not typically have contractual obligations. The court would be required to read into an implementer's membership in a SSO the duty to negotiate in good faith for RAND licenses. Surely the answer as to when an implementer becomes an unwilling licensee lies somewhere *after* the refusal of the first offer and *before* the refusal of judicially determined RAND rate. Until a court defines an "unwilling licensee," it is best practice to proceed as if an implementer is a willing licensee and offer and negotiate royalty rates in good faith.

C. ALTERNATIVES TO CONTRACT LITIGATION

Accompanying the growing concerns over the increase in SEP litigation are proposals to move parties from litigation back to negotiation or into arbitration. This section will briefly discuss two of these proposals as examples of non-litigious routes.

287. *See* Microsoft Corp. v. Motorola, Inc., 864 F. Supp. 2d 1023, 1036 (W.D. Wash. 2012).

288. *See* Microsoft Corp. v. Motorola, Inc., No. C10-1823JLR, 2013 U.S. Dist. LEXIS 60233, at *213–14 (W.D. Wash. Apr. 25, 2013). For discussion on determining unreasonable offers, see *supra* Section IV.B.1.

289. Note that non-responsiveness here is meant in the literal sense and not in the contract law concept of silence.

1. *Baseball-Style Arbitration*

Mark Lemley and Carl Shapiro propose an interesting arbitration format in a recent article.²⁹⁰ Under their approach, if an SEP holder and an implementer cannot agree on licensing terms, the SEP holder is obligated to enter into binding, “baseball-style” arbitration with any implementer to determine the royalty rate.²⁹¹ During this arbitration, each party submits its final offer to the arbitrator, who then chooses one of the two offers.²⁹² This obligation to enter arbitration may be dependent upon the implementer making a reciprocal commitment for any SEPs it owns that relate to the same standard.²⁹³ If the implementer is unwilling to enter into binding arbitration, the SEP holder is able to go to court to enforce its SEPs against the unwilling implementer.²⁹⁴

In order to accomplish this framework, SSOs would need to make binding arbitration a contractual obligation while contracting with patent holders during the standard-setting process.²⁹⁵ It is unclear if SSOs would be willing to do so, or what the effect would be if only some SSOs chose to implement binding arbitration clauses. However, Professors Lemley and Shapiro argue that this style of arbitration serves the aims of the RAND commitment by eliminating issues of patent holdup and undue leverage, as well as resolving the issue of injunctive relief in the RAND context.²⁹⁶

2. *Borrowing a Proposed Copyright Licensing Model*

Another option for reducing SEP litigation is adoption of a proposed copyright licensing model. Peter Menell and Ben Depoorter proposed a novel mechanism for copyright licensing that could be imported into the RAND licensing context.²⁹⁷ Importation of their model into the RAND context would work in the following way:²⁹⁸

The implementer would have the authority to make a formal offer of a royalty rate for the use of the SEP holder’s SEP portfolio. If the SEP holder did not respond, the implementer would continue to implement the standard

290. Lemley & Shapiro, *A Simple Approach*, *supra* note 81.

291. *Id.* at 1135.

292. *Id.* at 1138.

293. *Id.* at 1135.

294. *Id.*

295. *Id.* at 1138.

296. *Id.*

297. See Peter S. Menell & Ben Depoorter, *Copyright Fee Shifting: A Proposal to Promote Fair Use and Fair Licensing*, 105 CALIF. L. REV. 53 (2014).

298. For the explanation of the mechanism in the copyright context, see *id.* at 71–75.

(and the corresponding SEPs) but would pay their offered royalty rate into escrow. If the SEP holder rejected the proposed royalty rate and sued for infringement, the SEP holder would bear the implementer's litigation costs if the court determined that implementer's offered royalty rate was a RAND rate. Where, in the copyright case, the escrow amount would be returned to the original party, in the RAND context it would still likely go to the SEP holder, as they would be entitled to reasonable royalty rates under the policy goals and contractual obligations of the RAND commitment.

This approach places implementers in a more proactive position, allowing them to initiate licensing negotiations. Furthermore, it incentivizes parties to come to the negotiation table sooner and could ease the financial burden on implementers when enforcing the RAND commitment. It may also relieve some of the onus placed on SEP holders to enforce their rights to reasonable royalty rates. However, this framework may raise similar contractual issues to those raised in response to Motorola's argument that implementers must apply for a RAND rate, which the court rejected as inconsistent with the RAND commitment.²⁹⁹ This fee shifting mechanism would also have to be adopted by the SSOs, which is subject to the same concerns as the arbitration proposal.³⁰⁰

These two proposed alternatives to litigation are compelling and address some of the concerns about the use of contract law: the length and cost of litigation, the amount of resources RAND determinations could consume if district courts are increasingly asked to calculate them, and the fact that the RAND commitment was meant to reduce, not promulgate, litigation. Both proposals emphasize the importance of negotiation and incentivize a negotiation's successful completion.

However, both would require major policy changes by SSOs.³⁰¹ Even if only the SSOs that produce standards in the tech industry (where most of the SEP litigation arises from) chose to make the switch, there would need to be a consensus amongst SSOs in the wording of this extra contractual duty to ensure that two companies are not undergoing multiple procedures in a single transaction or dispute, just because the standards are from differing

299. *Microsoft Corp. v. Motorola, Inc.*, 864 F. Supp. 2d 1023, 1034 (W.D. Wash. 2012).

300. For discussion of the arbitration model, see *supra* Section IV.C.1.

301. For a more in-depth discussion of SSO-required arbitration and benefits and drawbacks companies may experience, see Jorge L. Contreras & David L. Newman, *Developing a Framework for Arbitrating Standards-Essential Patent (SEP) Disputes*, J. OF DISPUTE RESOLUTION (forthcoming 2014).

SSOs. It is also unknown if SSOs would be willing to involve themselves with how negotiations are conducted and how disputes are resolved.³⁰²

D. CONCLUSION

There is likely no single solution to the problem of increased SEP litigation. SEP litigation is complex, with its causes numerous and swiftly changing. But *Microsoft* and resulting cases used contract law to formulate the RAND commitment as a contract, identify implementers as third-party beneficiaries, establish the duty of good faith and fair dealing as a standard of conduct, and determine injunctive relief as an inappropriate remedy and state the actual harm suffered in the RAND context—all of which provided the enforcement mechanism that the RAND commitment had been lacking. Additionally, the groundbreaking RAND rate and range determination in *Microsoft* finally provided a judicial answer as to what a RAND rate actually is and provided a methodology for calculating it. Furthermore, the ability of the court to calculate a RAND rate provided both a much-needed remedy to the problem of stalled RAND negotiations and a forum in which relief can be sought.³⁰³ So while new developments alter the landscape of SEP litigation on a near daily basis, *Microsoft* and subsequent cases have slowly cleared a walking path to guide companies along.

302. *See supra* note 140.

303. *Microsoft Corp. v. Motorola, Inc.*, 854 F. Supp. 2d 993, 1036 (W.D. Wash. Feb. 27, 2012) (stating that the courthouse may be the only place to resolve differences when a third-party beneficiary does not believe the SEP holder is meeting its RAND obligations).

BOWMAN V. MONSANTO: BOWMAN, THE PRODUCER AND THE END USER

Tabetha Marie Peavey[†]

I. INTRODUCTION

Since the mid-1980s, agricultural biotechnology firms have routinely received patent protection for genetically modified (“GM”) seeds.¹ Due to the self-replicating nature of GM seeds, the firms employ a combination of patent law and contract law to limit and control the use of patented seeds.² This practice is largely motivated by a desire to sidestep patent law’s exhaustion doctrine, under which the initial authorized and unrestricted sale of a patented article “exhausts” or terminates the patentee’s rights to that article with respect to its ordinary useful life.³

Exhaustion of patent rights is an affirmative defense to infringement claims concerning the use or resale of a patented good.⁴ Because any user of self-replicating technology becomes a potential producer, the exhaustion doctrine poses a substantial commercialization risk for patentees of self-replicating technologies. The U.S. Supreme Court confronted the scope of patent exhaustion in the context of self-replicating GM seeds for the first time in *Bowman v. Monsanto Co.*⁵

Seeds are among the most abundant example of patented self-replicating technologies,⁶ and as such, the *Bowman* opinion was highly anticipated.⁷

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1. *See* J.E.M. Ag Supply, Inc. v. Pioneer Hi-Bred Int’l, Inc., 534 U.S. 124, 131 (2001) (noting that the U.S. Patent and Trademark Office Board of Patent Appeals and Interferences held in *Ex parte* Hibberd, 227 U.S.P.Q. 443 (B.P.A.I. 1985) that “plants were within the understood meaning of ‘manufacture’ or ‘composition of matter’ and therefore were within the subject matter of § 101”).

2. Eric J. Rogers, *The Inexhaustible Right to Exclude Reproduction Doctrine*, 14 COLUM. SCI. & TECH. L. REV. 389, 391 (2013).

3. *See* Quanta Computer, Inc. v. LG Elecs., Inc., 553 U.S. 617, 625 (2008).

4. *ExcelStor Tech., Inc. v. Papst Licensing GMBH & Co.*, 541 F.3d 1373, 1376 (Fed. Cir. 2008) (specifying that “patent exhaustion is a defense to patent infringement, not a cause of action”).

5. 133 S. Ct. 1761, 1764 (2013).

6. *See* Rogers, *supra* note 2, at 402.

Scholars predict this opinion will have broad implications for the biotechnology and software industries.⁸ *Bowman* presented the Court with a new problem for the doctrine of patent exhaustion: the self-replicating nature of seeds inevitably makes the consumer of a patented article a producer of the article.

Ultimately, the Court decided *Bowman* narrowly and held that, as far as seeds are concerned, a patentee's exclusionary right is not exhausted as to subsequent generations of seeds.⁹ In other words, the patentee's right is not exhausted even where use of an article necessitates the making of new, patented articles. Notably, however, the Court placed an emphasis on the affirmative actions of Bowman—a farmer and the defendant in *Bowman*—that were designed to exploit the technology of Monsanto—the patentee and the plaintiff in this case—and avoid compensating Monsanto for using its technology.¹⁰

This Note addresses two critical issues. First, because the patentee's exclusionary right is exhausted with respect to other end users or consumers, does *Bowman* stand for the proposition that there are now uses of self-replicating technologies that are inexhaustible?¹¹ In other words, would this case have been decided differently if Bowman was not actively seeking Monsanto's patented technology, but was instead solely planting commodity soybeans en masse? Answering this question focuses on whether there is a meaningful distinction between making and using self-replicating technologies, and whether there exists an alternative to the make/use distinction that courts could otherwise explore.

Second, if certain uses of self-replicating patented goods are virtually inexhaustible, is the existing liability framework for patent infringement appropriate for self-replicating technologies that are amenable to inadvertent production of new articles?¹² Related to this question is consideration of the pervasiveness of genetically modified crops in farming and how

7. For example, twenty-nine amicus briefs were filed in this case.

8. See Adam Garmezy, Comment, *Patent Exhaustion and The Federal Circuit's Deviant Conditional Sale Doctrine: Bowman v. Monsanto*, 8 DUKE J. CONST. L. & PUB. POL'Y SIDEBAR 197, 216 (2013) ("The Court's decision will likely have a significant impact on innovation incentives through the entire biotechnology sector."). See generally Zachary Loney, Note, *Bowman's Beanstalk: Patent Exhaustion in Self-Replicating Technologies*, 15 VAND. J. ENT. & TECH. L. 949 (exploring the similarities between biotechnology and incidental copying in software systems); Daniel Winston et al., *How Bowman v. Monsanto May Wreak Havoc on Biotechnology*, LAW 360 (Apr. 15, 2013), <http://www.law360.com/articles/432230/print?section=appellate>.

9. See *Bowman*, 133 S. Ct. at 1769.

10. *Id.* ("Bowman was not a passive observer of his soybeans' multiplication")

11. See *infra* Part IV.

12. See *infra* Part V.

contamination by GM seeds is a tangible risk for organic and non-GM farmers. Contamination by GM seeds like Monsanto's Roundup Ready® seeds not only results in infringement liability, but also risks an organic farmer's organic certification,¹³ and can cause large cleanup costs and market restrictions.¹⁴ Although Monsanto has promised it will not sue farmers for infringement of this sort,¹⁵ the public should not be left to rely on promises made by producers of self-replicating technologies. Although it is currently unclear that any potent legal protections exist for the "infringing" organic farmer whose field becomes contaminated by GM seeds,¹⁶ this Note suggests a framework that, at least, can allow these farmers to avoid infringement liability.

Part II of this Note briefly examines the development of the patent exhaustion doctrine. Part III describes Monsanto's self-replicating seed technology and the *Bowman* case. Part IV explains how exhaustion applies to Bowman and other end users, and it further expands on the make/use distinction central to, but otherwise glossed over in, the Supreme Court's *Bowman* opinion. Because many self-replicating technologies are purchased for the purpose of using them in a way that necessitates self-replication, Part IV concludes that certain uses, even if they are expected and ordinary, are now inexhaustible in the wake of *Bowman*. These uses are inexhaustible regardless of whether the consumer licenses directly with Monsanto or is a downstream purchaser. Part IV further suggests that regardless of whether

13. See Complaint at 5, *Organic Seed Growers & Trade Ass'n v. Monsanto Co.* (*Organic I*), 851 F. Supp. 2d 544 (S.D.N.Y. 2012) (No. 11 Civ. 2163).

14. There are at least twenty-six countries that have total or partial bans on production and importation of genetically modified organisms ("GMO"). Germany, Greece, Switzerland, Austria, China, India, France, Luxembourg, Bulgaria, Poland, Hungary, Italy, and Mexico are among these countries. Walden Bellow & Foreign Policy In Focus, *Twenty-Six Countries Ban GMOs—Why Won't the US?*, THE NATION (Oct. 29, 2013, 10:59 AM), <http://www.thenation.com/blog/176863/twenty-six-countries-ban-gmos-why-wont-us>. Countries that do not have restrictions on GM foods may also be less likely to accept GM crops if those crops are intended to be processed for sale in countries that do restrict the use of GM foods.

15. See *Organic Seed Growers & Trade Ass'n v. Monsanto Co.* (*Organic II*), 718 F.3d 1350 (2013), *cert. denied*, 134 S. Ct. 901 (2014).

16. The greatest perceived difficulty with common law tort remedies for field contamination is identifying a defendant. For example, where scholars suggest trespass and nuisance as potential remedies, farmers bringing those suits will likely be suing neighboring farmers rather than Monsanto itself. For discussions on remedies that could be made available to victims of field contamination, see Richard A. Repp, Note, *Biotech Pollution: Assessing Liability for Genetically Modified Crop Production and Genetic Drift*, 36 IDAHO L. REV. 585, 598–620 (2000). See also Drew L. Kershen, *Of Straying Crops and Patent Rights*, 43 WASHBURN L.J. 575, 582, 592 (2004).

the Court created an inexhaustible right to exclude reproduction¹⁷ or to exclude certain uses, the Court should have created an inexhaustible right to exclude exploitation. The distinction between exploitation and making/using better balances the concerns that drive the doctrine of patent exhaustion with the protection of Monsanto's patent rights and the property rights of end users. Finally, Part V considers a concern raised by the plaintiffs in *Organic Seed Growers and Trade Association v. Monsanto Co.*, who seek a declaratory judgment that would prevent Monsanto from suing them in the instance of field contamination. Part V also posits that a right of exploitation as discussed in Part IV can better help resolve infringement liability concerns for accidental infringers without having to drastically restructure the liability standard (i.e., adding an intent requirement).

II. THE PATENT EXHAUSTION DOCTRINE

A patent grants the inventor the right to exclude others from making, using, selling, and offering to sell or import her patented article.¹⁸ Thus, a patent does not grant affirmative rights to a patentee but grants negative, exclusionary rights.¹⁹ Because patent protection comes with the social cost of a monopoly,²⁰ the doctrine of patent exhaustion has come to exist as a matter of good public policy. It is intended to limit a patentee's rights with respect to a particular article sold and to discourage unwarranted compensation.²¹

The exhaustion doctrine stands for the principle that "the initial authorized sale of a patented item terminates all patent rights to that item."²² Patent exhaustion thus limits "a patentee's right to control what others can do with an article embodying or containing an invention" by exhausting the

17. See Rogers, *supra* note 2, at 391.

18. 35 U.S.C. § 271(a) (2012).

19. See generally *Bio-Tech. Gen. Corp. v. Genentech, Inc.*, 80 F.3d 1553, 1559 (Fed. Cir. 1996) (quoting *Vaupel Textilmaschinen KG v. Meccanica S.P.A.*, 944 F.2d 870, 879 n.4 (Fed. Cir. 1994)) ("It is elementary that a patent grants only the right to exclude others and confers no right on its holder to make, use, or sell.").

20. Thomas Jefferson once wrote, "I know well the difficulty of drawing a line between the things which are worth to the public the embarrassment of an exclusive patent, and those which are not." Letter from Thomas Jefferson to Isaac McPherson (Aug. 13, 1813), *in* 13 THE WRITINGS OF THOMAS JEFFERSON 326, 335 (Andrew A. Lipscomb ed., 1903); see also *Graham v. John Deere Co.*, 383 U.S. 1, 7–11 (1966) (discussing Thomas Jefferson's writings on the early patent system).

21. See *United States v. Masonite Corp.*, 316 U.S. 265, 280 (1942) ("Since patents are privileges restrictive of a free economy, the rights which Congress has attached to them must be strictly construed so as not to derogate from the general law beyond the necessary requirements of the patent statute.").

22. *Quanta Computer, Inc. v. LG Elecs., Inc.*, 553 U.S. 617, 625 (2008).

patentee's monopoly over a particular article sold.²³ When a patent is exhausted, the patentee no longer has the right to exclude the activities of ordinary use, resale (promoting the free movement of patented articles in commerce), and ordinary repair of the article.²⁴ Recognizing that a continued monopoly over a product would cause "inconvenience and annoyance to the public that . . . are too obvious to require illustration," the U.S. Supreme Court in *Keeler v. Standard Folding Bed Co.* articulated broadly that "one who buys patented articles of manufacture from one authorized to sell them becomes possessed of an absolute property in such articles, unrestricted in time or place."²⁵

Although the doctrine developed in response to skepticism about attaching permanent restrictions on personal property,²⁶ patent exhaustion is primarily rooted in the rationale that "[t]he purpose of the patent law is fulfilled with respect to any particular article when the patentee has received his reward . . . by the [authorized] sale of the article."²⁷ However, behind what appears to be a simply stated doctrine, even as articulated in *Keeler*, "lurks the complex task of identifying an authorized sale for the purposes of exhaustion."²⁸ Generally, a patent is exhausted, and a sale is authorized, when the patentee sold the patented article without placing any lawful restrictions on the sale.²⁹

23. *Bowman v. Monsanto Co.*, 133 S. Ct. 1761, 1766 (2013).

24. Amelia S. Rinehart, *Contracting Patents: A Modern Patent Exhaustion Doctrine*, 23 HARV. J.L. & TECH. 483, 485 (2010).

25. 157 U.S. 659, 666 (1895). In *Keeler*, the territorial restriction the patentee was attempting to enforce was included in the manufacturing licenses under which the good was made, but the restrictions did not expressly apply to any subsequent purchasers of the good. *Id.*

26. See Molly Shaffer Van Houweling, *The New Servitudes*, 96 GEORGETOWN L.J. 885, 914 (2008) (noting that early case law "reflect[s] a special skepticism about chattel servitudes that . . . reflect[s] a somewhat different mix of the concerns with notice and information costs, dead-hand control over the future, and externalities that motivated skepticism of land servitudes").

27. *Bowman*, 133 S. Ct. at 1766 (citing *United States v. Univis Lens Co.*, 316 U.S. 241, 249–50 (1942)).

28. Rinehart, *supra* note 24. The exhaustion doctrine has also become entwined with other affirmative defenses, such as patent owner misuse and restriction in restraint of trade. See *United States v. Univis Lens Co.*, 316 U.S. 241 (1942). The Federal Circuit, however, recognized *Univis Lens* as primarily an antitrust case. See *Mallinckrodt, Inc. v. Medipart*, 976 F.2d 700, 708 (Fed. Cir. 1992). But see John W. Osborne, *A Coherent View of Patent Exhaustion: A Standard Based on Patentable Distinctiveness*, 20 SANTA CLARA COMPUTER & HIGH TECH. L.J. 643, 649 (2004) ("[A]lthough attempts have been made, and are still made today, to characterize *Univis Lens* as an antitrust or implied license decision, the fundamental holding was based entirely on the patent exhaustion doctrine.").

29. Osborne, *supra* note 28, at 658.

One of the earliest cases to explore exhaustion in patented articles was *Adams v. Burke* in 1873.³⁰ There the plaintiff's predecessor in interest made a partial assignment of patent rights to a Boston company.³¹ The Boston-based company was licensed to make and sell the patented product, coffin lids, in Boston and within a ten-mile radius of the city.³² Burke purchased coffin lids from the Boston company and used the lids in his business, which operated outside of the designated ten-mile area.³³ However, because Burke purchased the coffin lids in Boston, the right to use the patented lids was exhausted by that sale and he was free to use them anywhere, even beyond the ten-mile radius.³⁴ The Court explained that:

so far as the use of it was concerned, the patentee had received his consideration, and it was no longer within the monopoly of the patent. It would be to engraft a limitation upon the right of use not contemplated by the statute nor within the reason of the contract to say that it could only be used within the ten-miles circle.³⁵

Thus, a property owner's rights embodying patented inventions are such that they should be able to use their property without restrictions. And the patentee's power to limit the use of a product embodying a patent is exhausted once the product is sold. *Adams* was followed by *Keeler*, in which the Court articulated that a purchaser of a lawfully made and sold patented item has not only the right to use that item, but also the right to sell the item without restrictions.³⁶

Entering the twentieth century, in *Motion Picture Patents Co. v. Universal Film Manufacturing Co.*, the Court refused to enforce tying restrictions³⁷ expressed in a label attached to movie projectors.³⁸ The patent holders of the motion picture projectors licensed the right to manufacture the machines and required their licensees to project only the patentee's own motion pictures with the machines.³⁹ Additionally, the patentee required licensees to pay

30. *See* 84 U.S. 453 (1873).

31. *Id.* at 456.

32. *Id.*

33. *Id.* at 454.

34. *Id.* at 456.

35. *Id.*

36. *See Keeler v. Standard Folding Bed Co.*, 157 U.S. 659, 666 (1895).

37. Tying restrictions are restrictions that require consumers of a patented article to purchase necessary but unpatented components of that article from the patentee, thus effectively expanding the patent's scope to encompass the components. *See* 2 WILLIAM C. HOLMES, INTELLECTUAL PROPERTY AND ANTITRUST LAW § 20:1 (Thomson Reuters ed., 2014).

38. 243 U.S. 502, 518–19 (1917).

39. *Id.* at 506.

royalties beyond the purchase price during the life of the patent, and prohibited them from selling the projectors below the patentee's list price.⁴⁰

In holding that these restrictions went far beyond the permissible scope of the patent right, the Court explained that "it is undeniably true, that the limited and temporary monopoly granted to inventors was never designed for their exclusive profit or advantage; the benefit to the public or community at large was another and doubtless the primary object in granting and securing that monopoly."⁴¹ Although this case was "complicated by the arguably anti-competitive effects of the specific restrictions at issue,"⁴² the Court's holding still reflected skepticism of running restrictions on the use of patented goods, and a desire to avoid unjustified patentee compensation through a strong patent exhaustion doctrine. The *Motion Picture Patents* ruling more firmly established a reluctance to enforce post-sale restrictions within Supreme Court jurisprudence.⁴³

However, in 1939 the Court briefly deviated from its tendency to endorse strong exhaustion principles by upholding a field-of-use restriction in *General Talking Pictures Corp. v. Western Electric Co.*⁴⁴ In *General Talking Pictures* the licensee had a license to sell the patented article only for private audio application (not commercial use) and was required to attach a notice of this restriction to the articles it sold.⁴⁵ *General Talking Pictures* was a commercial user but nonetheless purchased the patented article from the licensee with the sales notice, knowingly violating the license restriction. The Court dismissed the defense that *General Talking Pictures*'s purchases made through a licensed seller compensated the patentee and therefore exhausted the patents.⁴⁶ The Court held that patentees are entitled to grant licenses and that any sales subject to a restriction, so long as such restrictions do not stretch the patent beyond its scope, were not legally authorized sales that would exhaust the patentee's rights.⁴⁷

40. *Id.*

41. *Id.* at 509.

42. Van Houweling, *supra* note 26, at 915.

43. In *Henry v. A.B. Dick Co.*, the Court held that a patentee could use an express and conditional license to impose a running restriction on the patented item. 224 U.S. 1, 35–36 (1912). The Court distinguished *Adams* and *Keeler* as cases involving unconditional sales of the patented articles, whereas *A.B. Dick* involved a conditional sale. *Id.* at 12–19. However *A.B. Dick Co.* was expressly overruled by *Motion Picture Patents Co.*, 243 U.S. at 517.

44. 304 U.S. 175, *aff'd on reh'g*, 305 U.S. 124 (1939).

45. 304 U.S. at 180.

46. *Id.*

47. *Id.* at 181.

In *General Talking Pictures*, there was no authorized sale because the licensee was conveying a right he never had when the licensee knowingly sold the patented article for use in an unpermitted field. The Court emphasized not just the express nature of the restriction via the notice attached to the amplifiers (not unlike those in *Motion Picture Patents*), but also the purchaser's actual knowledge of the restriction and intentional plan to violate it.⁴⁸ Additionally, the Court declined to determine whether the notice restriction would be enforceable against purchasers had the licensee not violated the express restriction, and had the articles been "sold in the ordinary channels of trade"⁴⁹

In 1942, only a few years later, the Court heard *United States v. Univis Lens Co.* and held that price restrictions placed on downstream licensees were not enforceable because the patents on the finished articles were exhausted by initial sales of the unfinished article.⁵⁰ Univis Lens Company developed a licensing system whereby it licensed a lens manufacturer to make blank lenses, and then required wholesalers, finishing retailers, and prescription retailers (sellers) to acquire a license to purchase the blank lenses from the manufacturer and finish them as necessary for their customers.⁵¹ Although *Univis* was brought as an antitrust case, the Court ultimately decided it under the doctrine of exhaustion.⁵²

The issue before the Court in *Univis* was whether the Univis Company could fix resale prices through licenses on the downstream retailers and finishers after they purchased lens blanks from licensees licensed to manufacture the lens blanks.⁵³ The only use of these unfinished lens blanks, and the only reason for their purchase, was the eventual practice and manufacture of Univis's patented lenses.⁵⁴ The Court found exhaustion occurred, explaining that when a patent holder sells "an uncompleted article which . . . embodies essential features of [the] patented invention . . . and [i]s destined . . . to be finished by the purchaser in conformity to the patent, [the patent holder] has sold his invention so far as it is or may be embodied in that particular article."⁵⁵ Because the sale of the unfinished article exhausted

48. *Id.* at 182. On more than one occasion, the Court highlighted that "petitioner, when purchasing [the amplifiers] . . . had actual knowledge that the [seller] had no license to make such a sale." *Id.* at 180

49. *Gen. Talking Pictures Corp. v. Western Elec. Co.*, 305 U.S. 124, 125–27 (1939).

50. *United States v. Univis Lens Co.*, 316 U.S. 241 (1942).

51. *Id.* at 243–44.

52. *Id.*; see also Osborne, *supra* note 28, at 649.

53. *Id.*

54. *Id.* at 249.

55. *Id.* at 251.

Univis's patent rights with regard to the finishers, Univis was precluded from controlling subsequent sales.⁵⁶

Although Supreme Court precedent regarding the exhaustion doctrine seems to lack uniformity, the Federal Circuit has generally applied the doctrine more evenhandedly and conservatively. The Federal Circuit has taken the view that the Supreme Court cases skeptical of post-sale restrictions on patented articles were motivated by antitrust concerns. Under the Federal Circuit's view, the Supreme Court found those cases to lack application where the post-sale restrictions were not anticompetitive or otherwise unlawful. Historically, the Federal Circuit, unlike the Supreme Court, adopted a more favorable view of post-sale contractual restrictions on patented items.

In *Mallinckrodt, Inc. v. Medipart*, the Federal Circuit considered whether the manufacturer and patentee of a medical device could restrict purchasers to a "single use only" through notices on the device.⁵⁷ *Mallinckrodt* identified the reuse restriction as "a label license for a specified field of use, wherein the field is single (i.e., disposable) use."⁵⁸ Relying on *General Talking Pictures*,⁵⁹ the Federal Circuit upheld *Mallinckrodt*'s license as valid.⁶⁰ The *Mallinckrodt* court distinguished other Supreme Court patent exhaustion cases that deny the enforcement of post-sale restrictions, including *Univis Lens*, as being decided on other law or policy ground, and it maintained that parties retain the freedom to contract concerning the conditions of a sale.⁶¹ For some, the judicial enforcement of licenses in this case rightly reflects the preeminence of freedom of contract.⁶² Others, however, believe that *Mallinckrodt* and other cases recognizing a patentee's ability to contract around exhaustion using post-sale restrictions reflect a departure by the Federal Circuit from established Supreme Court jurisprudence.⁶³

56. *Id.* at 250–53.

57. 976 F.2d 700, 703 (Fed. Cir. 1992).

58. *Id.*

59. *Gen. Talking Pictures Corp. v. Western Elec. Co.*, 305 U.S. 124 (1939); *see supra* notes 44–49 and accompanying text.

60. *Mallinckrodt*, 976 F.2d at 704–05.

61. *Id.* at 708. This idea is also referred to as the "conditional sale doctrine."

62. *See, e.g.*, F. Scott Kieff, *Quanta v. LG Electronics: Frustrating Patent Deals By Taking Contracting Options Off the Table?*, 2008 CATO SUP. CT. REV. 315, 321–22 (2008) (arguing that strong patent exhaustion rules "interfere[] with the freedom of large commercial parties to strike the deals that are essential to avoiding and resolving disputes, and that help them better invest in new products and services").

63. *See, e.g.*, Richard H. Stern, *Post-Sale Patent Restrictions After Mallinckrodt—An Idea in Search of Definitions*, 5 ALB. L.J. SCI. & TECH. 1, 6–7 (1994).

Sixteen years following *Mallinckrodt*, the Supreme Court once again contributed to the exhaustion discourse with its decision in *Quanta Computer, Inc. v. LG Electronics, Inc.*,⁶⁴ an opinion which some believe nullified the Federal Circuit's conditional sale doctrine.⁶⁵ Some scholars argued that the ramifications of *Quanta* left patentees to use contract law as a way to remedy violations of post-sale restrictions on patented articles.⁶⁶ Others maintained that *Quanta* was overly expansive and a far more rigid application of the exhaustion doctrine than has ever been applied.⁶⁷

In *Quanta*, LG Electronics ("LGE") entered into a license agreement with Intel permitting Intel "to manufacture and sell microprocessors and chipsets that use the LGE patents."⁶⁸ Intel further agreed to give written notice to its customers explaining that they were not authorized to combine the Intel products they purchased with any non-Intel products in a manner that used LGE's method patents.⁶⁹ *Quanta* then did exactly what it was not authorized to do with the purchased Intel products.⁷⁰

Although the Federal Circuit found in LGE's favor on its patent infringement claims, holding that Intel's sales to customers were "conditional" and thus did not trigger patent exhaustion,⁷¹ the Supreme Court did not. The Court relied on *Univis Lens* in holding that exhaustion is triggered by the sale of an article embodying the "essential features of the patented invention," if the "only reasonable and intended use" of that article

64. 553 U.S. 617 (2008).

65. See, e.g., Jeremy N. Sheff, *Self-Replicating Technologies*, 16 STAN. TECH. L. REV. 229, 239 (2013). In explaining its decision, the Court stated that "the primary purpose of our patent laws is not the creation of private fortunes for the owners of patents but is 'to promote the progress of science and useful arts.'" 553 U.S. at 626 (quoting *Motion Picture Patents Co. v. Universal Film Mfg. Co.*, 243 U.S. 502, 511 (1917)). Commentators have noted that this statement signaled the *Quanta* Court's "intent to view the Patent Clause of the Constitution as erring on the side of utilitarianism, thus hoping to enrich the collective knowledge of society instead of simply promoting the natural rights of the inventor." Tod Leaven, *The Misinterpretation of the Patent Exhaustion Doctrine and the Transgenic Seed Industry in Light of Quanta v. LG Electronics*, 10 N.C. J.L. & TECH. 119, 132 (2008).

66. See, e.g., Leaven, *supra* note 65.

67. See, e.g., Kieff, *supra* note 62, at 318 ("This expansive approach converts a deal involving express contracting over a limited license to one party into a blanket license to a host of other commercial parties, regardless of the efforts by all parties to contract for a more modest result at a lower price.").

68. *Quanta Computer, Inc.*, 553 U.S. at 623.

69. *Id.*

70. *Id.*

71. *Id.* at 625.

is to practice the patent.⁷² But, the Court did acknowledge that exhaustion was only “triggered . . . by a sale authorized by the patent holder.”⁷³

Quanta did not overturn *Mallinkrodt*, and although the foregoing discussion may reveal a somewhat inconsistent body of case law where some restrictions trigger exhaustion and others do not, a fairly comprehensible rule emerges. Cumulatively, the case law establishes that exhaustion requires an authorized *and* unconditional sale of a chattel embodying the patent, for which the patentee has received full compensation.⁷⁴ Additionally, contractual conditions that the parties are aware of at the time of the sale will not be upheld if the condition “impermissibly broaden[s] the ‘physical or temporal scope’ of the patent grant with anticompetitive effect.”⁷⁵ It was speculated that the next time a court heard this kind of licensing case, “the application of the patent exhaustion doctrine [would] be much more stringent,” and *Quanta* would be a useful tool for farmers fighting seed-saving cases in particular.⁷⁶ As explained *infra* Part III.C, this prediction proved to be false.

III. **BOWMAN V. MONSANTO**

A. THE PATENTED TECHNOLOGY

Glyphosate is the active ingredient in many herbicides, including Roundup®, Monsanto’s bestselling product.⁷⁷ Glyphosate indiscriminately kills plants by inhibiting the metabolic activity of 5-enolpyruvylshikimate-3-phosphate synthase (“EPSPS”),⁷⁸ an enzyme found only in plants and certain bacteria.⁷⁹ EPSPS plays an important role in the

72. *Id.* at 631 (quoting *United States v. Univis Lens Co.*, 316 U.S. 241, 249–51 (1942)).

73. *Id.* at 636.

74. *See* Rogers, *supra* note 2, at 404.

75. Rinehart, *supra* note 24, at 497 (quoting *B. Braun Med., Inc. v. Abbott Labs.*, 124 F.3d 1419, 1426 (Fed. Cir. 1997)).

76. Tempe Smith, Note, *Going to Seed?: Using Monsanto as a Case Study to Examine the Patent and Antitrust Implications of the Sale and Use of Genetically Modified Seeds*, 61 ALA. L. REV. 629, 637, 639 (2010).

77. *Bowman v. Monsanto Co.*, 133 S. Ct. 1761, 1764 (2013).

78. Laura F. Bradshaw, *Perspectives on Glyphosate Resistance*, 11 WEED TECHNOLOGY 189, 190 (1997).

79. Gerald D. Mill, *Glyphosate-Resistant Crops: History, Status, and Future*, 61 PEST MGMT. SCI. 219, 219 (2005).

conversion of sugars into amino acids necessary for growth.⁸⁰ Plants with inherent glyphosate-resistant EPSPS are virtually non-existent in nature.⁸¹

Monsanto invented and patented a genetic modification that enables plants to survive exposure to glyphosate.⁸² Monsanto's genetic modification creates the Roundup Ready® seed by inserting a gene that encodes a "glyphosate-tolerant enzyme" into a plant's genome.⁸³ Distinct from other genetically modified organisms, the traits in Monsanto's soybean seeds are "'true to seed,' meaning that the patented genetic material transfers to each successive generation of seeds."⁸⁴ Because the technology is easily replicated by simply planting one generation of seed, "sales" of Monsanto's technology to all growers, whether from Monsanto directly or its licensed producers, are subject to a limited use license called the "Monsanto Technology/Stewardship Agreement" (the "Technology Agreement").⁸⁵

Monsanto began marketing and selling Roundup Ready® soybean seeds in 1996.⁸⁶ The company also licenses its technology to seed producers who are then able insert glyphosate resistance into the germplasm of their own seeds.⁸⁷ Generally, Monsanto licenses the right to make and sell Roundup Ready® seeds to producers like Pioneer and Syngenta, who then sell seeds, pursuant to the Technology Agreement, to farmers.⁸⁸ Farmers planting Monsanto's Roundup Ready® soybean seeds are able to use glyphosate-based herbicides to control weed populations without damaging their crops.⁸⁹

However, pursuant to the Technology Agreement, the now "licensed" grower agrees, among other things, to use the Roundup Ready® seed for planting a commercial crop only in a single season, and not to save any crop

80. Bradshaw, *supra* note 78, at 190.

81. *Id.* at 195. However, following the introduction of glyphosate-resistant crops and thus, the increased use of glyphosate-based herbicides, scientists have discovered weed species with evolved resistance to glyphosate. *See, e.g.*, A. Stanley Culpepper et al., *Glyphosate-Resistant Palmer Amaranth (Amaranthus plameri) Confirmed in Georgia*, 54 WEED SCI. 620 (2006); Lim J. Lee & Jeremy Ngim, *A First Report of Glyphosate-Resistant Goosegrass (Eleusine indica (L.) Gaertn) in Malaysia*, 56 PEST MGMT. SCI. 336 (2000); Stephen B. Powels, *Evolved Glyphosate-Resistant Weeds Around the World: Lessons to be Learnt*, 64 PEST MGMT. SCI. 360 (2008).

82. *Bowman*, 133 S. Ct. at 1764.

83. *Monsanto Co. v. Bowman*, 657 F.3d 1341, 1344 (Fed. Cir. 2011), *aff'd*, 133 S. Ct. 1761 (2013).

84. Loney, *supra* note 8, at 955.

85. *See Monsanto*, 657 F.3d at 1344.

86. *Id.*

87. *Id.*

88. *See McIntosh v. Monsanto Co.*, 462 F. Supp. 2d 1025, 1028 (E.D. Mo. 2006).

89. *Monsanto*, 657 F.3d at 1344.

for replanting or to supply saved seed to anyone else for replanting.⁹⁰ Although the express terms of the Technology Agreement forbid growers from planting or selling the progeny of the licensed Roundup Ready® seeds, or “second-generation seeds,” Monsanto does allow growers to sell second-generation seed to local grain elevators⁹¹ as a commodity without further restrictions.⁹²

Monsanto invests over \$2.6 million a day in research and design.⁹³ In light of these high investment costs, Monsanto is not shy about protecting its patent rights.⁹⁴ Since it started licensing its patented seeds, the company has filed more than 144 patent infringement lawsuits involving 410 different farmers and fifty-six small farm businesses.⁹⁵ Of these lawsuits, approximately seventy ended in judgments for Monsanto, with aggregate damages totaling close to \$23.67 million.⁹⁶ The most recent of these cases, which made it to the Supreme Court, was *Bowman v. Monsanto Co.* In October 2007, Monsanto brought suit against farmer Vernon Hugh Bowman, alleging that Bowman “willfully infringed” two of Monsanto’s patents when he “planted the soybean seed he purchased from [a] grain elevator.”⁹⁷

90. *Id.* at 1345; *see also* 2011 Monsanto Technology/Stewardship Agreement (Limited Use License), available at http://thefarmerslife.files.wordpress.com/2012/02/scan_doc_0004.pdf. This restriction on seed saving is a controversial one. A farmer’s right to save, replant, and resell seeds with valuable traits was once a universal and unquestioned concept. As described by one commentator, “[s]eed saving is an ingrained part of agriculture, and today it is believed that over eighty percent of farmers in developing nations rely on saved seeds for survival.” Haley Stein, *Intellectual Property and Genetically Modified Seeds: The United States, Trade, and the Developing World*, 3 NW. J. TECH. & INTELL. PROP. 160, 162 (2005).

91. “Grain elevators are facilities at which grains are received, stored, and then distributed for direct use, process manufacturing, or export.” 1 U.S. ENVTL. PROT. AGENCY, COMPILATION OF AIR POLLUTANT EMISSION FACTORS § 9.9.1.1 (5th ed. 2009) available at <http://www.epa.gov/ttnchie1/ap42/ch09/final/c9s0909-1.pdf>.

92. *Monsanto*, 657 F.3d at 1345.

93. *Why Does Monsanto Sue Farmers Who Save Seeds?*, MONSANTO, <http://www.monsanto.com/newsviews/Pages/why-does-monsanto-sue-farmers-who-save-seeds.aspx> (last visited Dec. 15, 2013).

94. *Id.*

95. CTR. FOR FOOD SAFETY, SEED GIANT VS. U.S. FARMERS (2013), available at http://www.centerforfoodsafety.org/files/seed-giants_final_04424.pdf. This number does not take into account settlements; over seven hundred other matters have been settled out of court. *See* Jessica Lynd, *Gone With the Wind: Why Even Utility Patents Cannot Fence In Self-Replicating Technologies*, 62 AM. U. L. REV. 663, 666 (2013).

96. CTR. FOR FOOD SAFETY, *supra* note 95.

97. *See* Brief for Petitioner at 9, *Bowman v. Monsanto Co.*, 133 S. Ct. 1761 (2012) (No. 11-796).

B. BOWMAN'S ACTIONS

Vernon Bowman is a Knox County, Indiana farmer who grows wheat and soybeans on three hundred acres of land belonging to his family.⁹⁸ He typically planted two crops in one season, and the second crop of the season is a late-season harvest that is a financially risky endeavor.⁹⁹ The second crop of the season is riskier because “heat, drought, and floods” are all more likely to occur in late summer, and a good second crop requires farmers “to plant twice as many seeds.”¹⁰⁰

In 1999, because of the heightened risk associated with planting a second crop in one season, Bowman decided to try something a little different. For his first crop of the season, Bowman purchased Roundup Ready® soybeans seeds, paid the premium price, and signed Monsanto’s Technology Agreement. Abiding by the Technology Agreement, he used all the purchased seed for planting and sold his entire harvest to a grain elevator. However, for his second crop of that season he decided not to purchase the pricier Roundup Ready® seeds.¹⁰¹ Instead, Bowman decided to buy and plant cheaper “commodity grain,” which is grain stored in a grain elevator as an undifferentiated mixture of several different seed varieties from numerous farms.¹⁰² Commodity grain is generally sold for consumption.¹⁰³

Bowman anticipated that much of the commodity grain would contain Monsanto’s patented genetic trait and after planting the commodity soybean seeds, he treated his field with a glyphosate-based herbicide.¹⁰⁴ The result was a field of surviving plants that obviously contained Monsanto’s patented technology, glyphosate resistance.¹⁰⁵ This practice allowed Bowman to utilize Monsanto’s patented technology while avoiding the premium price for Roundup Ready® seeds. Bowman repeated this process for the next eight years, saving seeds for his late season harvest.¹⁰⁶ He added to his “stock of saved seeds by making periodic additional purchases of commodity soybeans

98. Andrew Pollack, *Farmer’s Supreme Court Challenge Puts Monsanto Patents at Risk*, N.Y. TIMES, Feb. 16, 2013, at B1.

99. *Id.*

100. Elliot Marshall, *Supreme Court to Review Scope of Monsanto’s Seed Patents*, 339 SCI. 639, 639 (2013).

101. Brief for Petitioner, *supra* note 97, at 6.

102. *Id.* at 5.

103. *Id.*

104. *Bowman v. Monsanto Co.*, 133 S. Ct. 1761, 1765 (2013).

105. *Id.*

106. Brief for Respondents at 7, *Bowman*, 133 S. Ct. 1761 (2013) (No. 11-796).

from the grain elevator and killing off all plants that lacked the patented biotechnology.”¹⁰⁷

Although Bowman successfully evaded Monsanto’s Technology Agreement for his late season crops, he neglected to account for Monsanto’s patent rights. In October of 2007, Monsanto sued Bowman.¹⁰⁸

C. PROCEDURAL HISTORY AND THE SUPREME COURT DECISION

Monsanto sued Bowman to prevent further infringement of its patents and for damages arising from Bowman’s past infringement.¹⁰⁹ The two patents at issue were RE39,247E (the ‘247 patent) and 5,352,605 (the ‘605 patent).¹¹⁰ The ‘247 patent describes a DNA molecule containing a genetic code for an enzyme that enables Roundup Ready® crops to withstand glyphosate-based herbicides.¹¹¹ Monsanto asserted infringement of claims in the ‘247 patent for the DNA molecules coding for glyphosate-tolerant EPSPS themselves, glyphosate-tolerant plant cells comprising the DNA molecules, seeds and plants comprising the DNA molecules, and a method of controlling weeds by planting the transformed seeds and spraying glyphosate over the fields in which those seeds were planted.¹¹² The ‘605 patent describes the use of certain viral vectors¹¹³ to form a chimeric gene¹¹⁴ for the incorporation of new genetic material into plant cells.¹¹⁵ Monsanto asserted infringement claims of the ‘605 patent for the chimeric gene expressed in plant cells and for the plant cells comprising that chimeric gene.¹¹⁶

Initially, Bowman did not raise patent exhaustion in his answer or pursue any discovery on the theory. However, after Monsanto moved for summary judgment, the district court ordered submissions regarding the patent

107. *Id.*

108. *Monsanto Co. v. Bowman*, 657 F.3d 1341, 1346 (Fed. Cir. 2011) *aff’d*, 133 S. Ct. 1761 (2013).

109. *Id.*

110. *Id.* at 1343.

111. Brief for Respondents, *supra* note 106, at 2 n.1.

112. *Monsanto*, 657 F.3d at 1343–44.

113. A simple explanation of this process may be helpful. First, genes of interest are isolated and inserted into appropriate vectors. Vectors are tools used to insert target genes into a host organism’s cells and to replicate that target gene in the cells. Viruses tend to be used as vectors when the genetic engineering of higher organism forms, such as plants, is being attempted. See DAVID P. CLARK, *MOLECULAR BIOLOGY* 627 (2009).

114. “A chimera is any hybrid molecule of DNA, such as a vector plus a cloned gene, which has been engineered from two different sources of DNA.” *Id.* at 619.

115. *Monsanto*, 657 F.3d. at 1343.

116. *Id.*

exhaustion doctrine and the implications of *Quanta* on Bowman's case.¹¹⁷ Even in light of *Quanta*, the district court found the exhaustion doctrine inapplicable because Monsanto never authorized any sale of the soybeans that Bowman harvested for his late-season crop.¹¹⁸ Relying on Federal Circuit law, the district court granted summary judgment, reasoning that

[n]o unconditional sale of the Roundup Ready® trait occurred because the farmers could not convey to the grain dealers what they did not possess themselves The grain elevator/dealer from whom Bowman bought the soybeans had no right to plant the soybeans and could not confer such a right on Bowman.¹¹⁹

The court granted summary judgment to Monsanto and entered final judgment awarding Monsanto compensatory damages of \$84,456.30 plus costs and interest.¹²⁰ The damage award was based on a reasonable royalty of acres planted with commodity soybeans.¹²¹ On appeal to the Federal Circuit, Bowman renewed his argument that Monsanto's patent rights in second—and subsequent—generation soybeans were exhausted, and that prior Federal Circuit decisions holding to the contrary—*Monsanto Co. v. McFarling*¹²² and *Monsanto Co. v. Scruggs*¹²³—were no longer valid after *Quanta*.¹²⁴

In *McFarling*, the defendant violated Monsanto's Technology Agreement by saving a quantity of his harvest to use as seed for the next season.¹²⁵ The Federal Circuit rejected the exhaustion argument and found liability because the "exhaustion of the patent right [was] not implicated, as the new seeds grown from the original batch had never been sold."¹²⁶ The court further reasoned that because Monsanto's patent read on all generations of soybeans, the restriction in the licensing agreement that prohibited the planting of

117. Brief for Respondents, *supra* note 106, at 8.

118. *Monsanto Co. v. Bowman*, 686 F. Supp. 2d 834, 837–39 (S.D. Ind. 2009) (“[D]espite Bowman’s compelling policy arguments addressing the monopolizing effect of the introduction of patented genetic modifications to seed producing plants on an entire crop species, he has not overcome the patent law precedent. . . . [T]he court may disagree with the decision to award unconditional patent protection to Monsanto for its genetically altered soybeans and their progeny, but this court does not make policy; rather, it interprets and enforces the law, which, in this case, does not support Bowman.”).

119. *Id.* at 839.

120. *Bowman v. Monsanto Co.*, 133 S. Ct. 1761, 1765 (2013).

121. Brief for Petitioner, *supra* note 97, at 9.

122. *Monsanto Co. v. McFarling (McFarling II)*, 363 F.3d 1336 (Fed. Cir. 2004).

123. *Monsanto Co. v. Scruggs*, 456 F.3d 1328 (Fed. Cir. 2006).

124. *Quanta Computer, Inc. v. LG Electronics, Inc.*, 553 U.S. 617 (2008).

125. *Monsanto Co. v. McFarling (McFarling I)*, 302 F.3d 1291, 1294 (Fed. Cir. 2002).

126. *Id.* at 1299.

second-generation seed does not extend Monsanto's rights under the patent statute.¹²⁷

Unlike McFarling who signed a licensing agreement, Scruggs never did.¹²⁸ Prior to *Bowman*, *Scruggs* was the Federal Circuit's most recent decision involving patent exhaustion as applied to self-generating technology. *Scruggs* held that, as to the saved second-generation seeds, the patent applied as if no purchase occurred.¹²⁹ The Federal Circuit stated that "[t]he fact that a patented technology can replicate itself does not give a purchaser the right to use replicated copies of the technology."¹³⁰ Because it was understood that subsequent generations of seeds fall within the scope of Monsanto's patents, the court noted that, "[a]pplying the first sale doctrine to subsequent generations of self-replicating technology would eviscerate the rights of the patent holder."¹³¹ This statement is without exaggeration. The statutory duration of patent protection becomes irrelevant if Monsanto's market for its patented good could be so easily supplanted by subsequent generations of soybeans after a single round of initial sales.¹³²

Relying on *Scruggs* and *McFarling*, the Federal Circuit reasoned that "[e]ven if Monsanto's patent rights in the commodity seeds are exhausted, such a conclusion would be of no consequence because once a grower, like Bowman, plants the commodity seeds containing Monsanto's Roundup Ready® technology and the next generation of seed develops, the grower has created a newly infringing article."¹³³ Monsanto only allows seeds to be sold for planting subject to a limited license that delineates the allowable uses for its soybean seeds and their progeny. The first sale doctrine of patent exhaustion was not implicated because the new seeds, grown from the original batch, were never subject to an authorized sale.¹³⁴ Further, the court explained that the "right to use" a patented article, even following an authorized sale, "does not include the right to construct an essentially new

127. *Id.*

128. *See Scruggs*, 459 F. 3d at 1333.

129. *Id.* at 1336.

130. *Id.*

131. *Id.*

132. See Jason Savich, *Monsanto v. Scruggs: The Negative Impact of Patent Exhaustion on Self-Replicating Technology*, 22 BERKELEY TECH. L.J. 115, 120–21 (2007) (citing Peter Menell & Suzanne Scotchmer, *Intellectual Property*, in HANDBOOK OF LAW AND ECONOMICS (A. Mitchell Polinsky & Steven Shavell, eds. 2007)).

133. *Monsanto Co. v. Bowman*, 657 F.3d 1341, 1348 (Fed. Cir. 2011)

134. *Id.* at 1347 (quoting *Monsanto Co. v. McFarling (McFarling I)*, 302 F.3d 1291, 1299 (Fed. Cir. 2002)).

article on the template of the original, for the right to make the article remains with the patentee.”¹³⁵

The Federal Circuit had long defined the scope of one’s right to use a self-replicating patented article, holding that even an ordinary and expected use that necessitates a making will result in a newly infringing patented article. However, there had not yet been a definitive ruling on the issue by the Supreme Court, which has historically pushed for a stronger patent exhaustion doctrine than the Federal Circuit. In his petition for certiorari, McFarling argued that Supreme Court “precedents have long held that one who purchases a good from the patent owner or from a licensee is free to make the ordinary and expected use of that good.”¹³⁶ He also argued that it “defie[d] both common sense and the patent-exhaustion doctrine” to hold that a farmer who purchases seed for planting infringes Monsanto’s patent when the plant naturally produces new seeds.¹³⁷ Despite denying certiorari in both *McFarling*¹³⁸ and *Scruggs*,¹³⁹ the Supreme Court decided to hear Bowman’s case.

In affirming the Federal Circuit’s decision, the Court started with defining the doctrine of patent exhaustion as a limit on the patentee’s right to control what others can do with an article embodying or containing an invention.¹⁴⁰ However, the Court noted that the doctrine restricts the patentee’s rights only to a “particular article” sold.¹⁴¹ Thus, the doctrine leaves untouched the patentee’s ability to prevent a buyer from making new copies of the patented item. The Court concluded that because Bowman’s actions effectively made new copies of Monsanto’s soybean without its permission, the exhaustion doctrine did not protect him.¹⁴²

With this in mind, the Court rejected Bowman’s first argument that exhaustion should apply because “seeds are meant to be planted” and that “allowing Monsanto to interfere with that use would create an impermissible exception to the exhaustion doctrine for planted seeds and other self-

135. *Id.* at 1348 (quoting *Jazz Photo Corp. v. Int’l Trade Comm’n*, 264 F.3d 1094, 1102 (Fed. Cir. 2001)).

136. Petition for Writ of Certiorari at 23, *McFarling v. Monsanto Co. (McFarling III)*, 552 U.S. 1096 (2007) (No. 07-241), 2007 WL 2406828.

137. *Id.* at *22.

138. *McFarling III*, 552 U.S. 1096 (2008).

139. *Scruggs v. Monsanto Co.*, 549 U.S. 1342 (2007). In 2008, the Court also denied certiorari for *Monsanto Co. v. David*, 516 F.3d 1009 (Fed. Cir. 2008), *cert. denied*, 555 U.S. 888 (2008), another seed saving case.

140. *Bowman v. Monsanto Co.*, 133 S. Ct. 1761, 1766 (2013).

141. *Id.*

142. *Id.* at 1767.

replicating technologies.”¹⁴³ The Court reasoned that, “if simple copying [like what Bowman did here] were a protected use, a patent would plummet in value after the first sale of the first item containing the invention.”¹⁴⁴ Furthermore, the Court also rejected Bowman’s second argument that “it was the planted soybean, not Bowman himself, that made replicas of Monsanto’s patented invention.”¹⁴⁵ The Court reasoned that Bowman was no passive observer of the soybean replication because he took multiple steps to produce glyphosate-resistance soybeans for his late-season crop eight years in a row.¹⁴⁶ In light of Bowman’s procurement, planting, harvesting, and usage of the patented seed, the Court found that Bowman himself made infringing copies of Monsanto’s patented invention and was liable for patent infringement.

Although the Court reached the correct outcome, it reached this outcome via the wrong route, neglecting to acknowledge that the distinction between making and using is ill-suited for approaching the question of patent exhaustion in self-replicating patented articles. Rather than Bowman asking for “an impermissible exception to the exhaustion doctrine for planted seeds and other self-replicating technologies,”¹⁴⁷ it seems that Monsanto in fact received that exception.¹⁴⁸ For instance, in *Quanta*, method patents were exhausted despite never being sold, but here the Court reasoned that patent exhaustion could not apply to second-generation seeds that were never purchased. In reality, patent exhaustion now applies to some uses of seeds, but not the ordinary use of planting because that use is now understood as a making.

As discussed *infra* Part IV, this murky distinction, or lack of distinction, between making and using is not only unsatisfying, but problematic. Rather than upholding an inexhaustible right to exclude certain uses, a better approach to the patent exhaustion doctrine, and its relationship to self-replicating technologies, would be the construction of an implied and inexhaustible right to exclude exploitation. The distinction between exploitation and making/using may be better able to balance the concerns that drive the doctrine of patent exhaustion with the protection of Monsanto’s patent rights and the property rights of end users. The creation

143. *Id.* at 1768 (internal quotations omitted).

144. *Id.*

145. *Id.* at 1769 (internal quotation and citation omitted).

146. *Id.*

147. *See id.* at 1768 (internal quotation omitted).

148. *See* Garmezzy, *supra* note 8, at 216 (arguing that when *Bowman* reached the Supreme Court, “the Court should [have] exempt[ed] self-replicating technologies from the exhaustion doctrine by construing subsequent generations as reconstructions”).

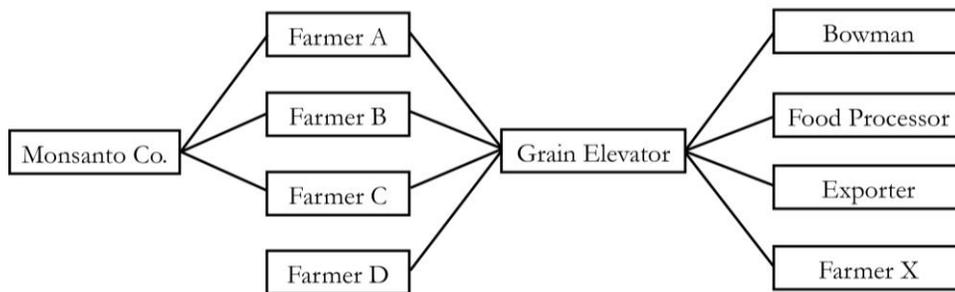
of a doctrine that focuses on exploitation of the patented technology, rather than making or using it, may also serve as a potential liability shield for accidental infringers of self-replicating technologies.

IV. CONSEQUENCES OF *BOWMAN*

A. MONSANTO'S PATENT RIGHTS ARE EXHAUSTED AS TO THE END USER

Just as any end user in a chain of distribution would have the right to use the article he or she purchased, Bowman had a right to use the seeds he purchased from the grain elevator. Figure 1 represents a very simplified chain of distribution where each line represents a sale to the entity immediately to the right of the line, from the entity on the immediate left of the line.

Figure 1: Chain of Distribution for Seeds



Monsanto licenses its technology to various farms, in this case Farmers A–C (in this example, Farm D does not purchase its seed from Monsanto, but from another supplier). Farmers A–D then sell their products to a grain elevator. Consumers then purchase commodity grain from the grain elevator for a variety of purposes. The Food Processor will use the grain to manufacture cereals or other grain-based food products, while the Exporter will sell or trade U.S. grain on a foreign market. Farmer X may buy commodity grain as feed for her livestock while Bowman buys the commodity for planting.

Neglecting for a moment Monsanto's Technology Agreement, it should be clear that Monsanto has patent rights that are exhausted with respect to each end user. The secondary market is strengthened by a consumer's confidence in his or her ability to resell the purchased article. Thus, the grain elevator must be able to sell to end users, and end users must be confident that the patentee no longer has the right to exclude activities that include the ordinary use of their purchased goods.

Even accounting for Monsanto's Technology Agreement, Monsanto's rights to its soybeans would still be exhausted at the point of reaching Bowman. The Technology Agreement permits the suppliers, the Farmers, to sell to a grain elevator without condition, and, as a matter of public policy, Monsanto's rights to sell and use the patented articles have been exhausted.¹⁴⁹ The distinctions among the Exporter, the Food Processor, and Farmer X all lie in the patent rights they would claim are exhausted. The Exporter would claim exhaustion of Monsanto's right to sell its patented article. Farmer X, who feeds her cattle, and the Food Processor, which makes grain-based food products, would claim exhaustion of Monsanto's right to an ordinary use of the patented article. However, the distinction in Bowman's case is that the ordinary use of planting these purchased seeds actually makes more seeds. This distinction is unique to self-replicating technologies, and here, Bowman's normal use of the seed necessarily makes new infringing articles.

It is well established that "a second creation" of a patented item "call[s] the monopoly, conferred by the patent grant, into play for a second time."¹⁵⁰ The exhaustion doctrine never authorizes a purchaser to "make" new copies of the invention.¹⁵¹ However, consider what the result would be if Farmer X, instead of merely using soybeans purchased from the grain elevator to feed her cattle, now decided to plant a field of commodity soybeans and grow her own feed. And unlike Bowman, she *did not* select for the Roundup Ready® soybeans. As a pesticide-free farmer, how would Farmer X be able to identify and remove the infringing crops without causing substantial harm to her harvest? Further, is Farmer X actually using Monsanto's technology if she is a pesticide-free farmer? By planting commodity soybeans indiscriminately and not selecting for Monsanto's patented biotechnology, is Farmer X simply making use of the natural properties of seeds that are not actually

149. See Rinehart, *supra* note 24, at 494 ("When the patent owner grants a license to sell the patented invention, his rights to resale and use are exhausted when the licensee sells the patented good" without violating any restrictions of the licensing agreement.).

150. See *Aro Mfg. Co. v. Convertible Top Replacement Co.*, 365 U.S. 336, 346 (1961).

151. See *Microsoft Corp. v. AT & T Corp.*, 550 U.S. 437, 452–53 (2007) (finding that identical copies of software must be treated as separate components from the master disk used to make them, even those whose only use of the master disk was to create such copies); *American Cotton-Tie Co. v. Simmons*, 106 U.S. 89, 93 (1882) (holding that creating new cotton ties "by piecing together severed pieces of" old patented ties was impermissible reconstruction); see also *Husky Injection Molding Sys. Ltd. v. R&D Tool & Eng'g Co.*, 291 F.3d 780 (Fed. Cir. 2002) (finding that where molds employed in a patented injection molding machine were readily replaceable parts, replacement of the molds was akin to permissible repair and did not result in direct infringement of patent). *But see Aro Mfg. Co.*, 365 U.S. at 346 (holding that replacing the fabric portion of a car's convertible roof was permissible repair and not the construction of an infringing article).

patentable?¹⁵² The Court's focus on Bowman's active participation in selecting for Monsanto's technology leaves ambiguous whether Farmer X's use should be considered different from Bowman's, or if Farmer X's use, regardless of her passivity, would still entail making and thus infringing.¹⁵³

B. MAKING AND USING SEEDS: A SELF-REPLICATING TECHNOLOGY

Consistently, courts have failed to acknowledge that the distinction between making and using is ill-suited for approaching the question of patent exhaustion as it applies to self-replicating technologies.¹⁵⁴ The patent exhaustion doctrine typically implicates the rights of sale and use. But because it is unlikely a product will be purchased without the intent to use or resell the product,¹⁵⁵ self-replicating technologies also implicate the patentee's right to exclude others from making the patented article. As Professor Rinehart points out, for consumers the "distinction between a product and the intellectual property embodied within it creates an uneasy tension."¹⁵⁶ This tension is heightened when there is a possibility that certain uses are virtually inexhaustible regardless of the purchaser's position on the chain of distribution or how the purchase was or was not structured.

It was not until relatively recently that making a patented article could be a necessary element of the ordinary and expected use of the patented article. This question first arose in the animal context, concerning the extent to which purchasers of transgenic organisms¹⁵⁷ should be able to use their property. In 1989, the Transgenic Animal Patent Reform Act was reintroduced to exempt the reproduction of genetically modified farm animals from the definition of infringement,¹⁵⁸ while a separate bill attempted to initiate a two-year moratorium on patent grants for genetically modified animals.¹⁵⁹ These bills were motivated by a fear that individuals would not be able to fully utilize their property, the animal, if farmers were not allowed to "utilize the animals in any farming operation," which included breeding and

152. "[Q]ualities [that] are the work of nature . . . are of course not patentable." *Funk Bros. Seed Co. v. Kalo Inoculant Co.*, 333 U.S. 127, 130 (1948).

153. *See* *Bowman v. Monsanto Co.*, 133 S. Ct. 1761, 1766–67 (2013).

154. *See* *Sheff*, *supra* 65, at 238 ("[T]he application of the use/make distinction in the Roundup-Ready cases ignores the elephant in the room: the only and intended 'use' of seeds or any other self-replicating technology *necessarily* 'makes' a newly infringing article—this is the defining characteristic of self-replicating technologies.").

155. *See* *Adams v. Burke* 84 U.S. 453, 455–56 (1873).

156. Rinehart, *supra* note 24, at 484.

157. Transgenic organisms are organisms that have been genetically modified with the introduction of DNA sequences from another organism.

158. *See* Transgenic Animal Patent Reform Act, H.R. 1556, 101st Cong. (1989).

159. *See* H.R. 3247, 101st Cong. (1989).

selling.¹⁶⁰ Seeds, such as Monsanto's Roundup Ready® soybean, present similar concerns and are particularly troubling not only because their only real purpose is to reproduce, but also because all the aspects of the patented biotechnology are passed to subsequent generations.

There have been various attempts to define the proper role of patent exhaustion for subsequent generations of self-replicating technologies.¹⁶¹ However, the solution for both users and patentees needs more than the current binary approach of the make/use distinction. Further, not all self-replicating technologies are alike, and it is difficult to anticipate the future trajectory of patents on these kinds of technologies. Any solution should more carefully strike a balance between incentivizing innovation in self-replicating technologies, and aiming to avoid patent misuse and anticompetitive abuses.

With these considerations in mind, scholars have suggested ways to modify the common law doctrine for self-replicating technologies as a specific class. For example, Professor Sheff suggests patent exhaustion for self-replicating technologies “should depend on analysis of the relationship between demand for first-generation embodiments of a self-replicating technology and demand for subsequent-generation embodiments, and particularly the patentee’s ability to charge supracompetitive prices in its primary market where consumers are able to substitute secondary-market embodiments.”¹⁶² Making the doctrine of exhaustion far more fact-intensive, Sheff’s suggestion would incorporate into the doctrine a reliable and flexible analytic framework for self-replicating technologies.

Applying Sheff’s framework to *Bowman*, Monsanto’s inability to charge supracompetitive prices in the primary market (due to the existence of competitors and farmers’ inability to pay), along with the high demand for

160. Scott A. Chambers, *Exhaustion Doctrine in Biotechnology*, 35 IDEA 289, 292 (1995).

161. See Nathan A. Busch, *Jack and the Beanstalk: Property Rights in Genetically Modified Plants*, 3 MINN. INTELL. PROP. REV. 134–47 (2002) (arguing that because planting only allows a seed to grow, farmers are not making a patented seed the way a developer of the plant in the laboratory can). *But see* Kershen, *supra* note 16, 584–85 (acknowledging that construction of the “words ‘make’ and ‘use’ to exclude planting, growing, and harvesting as infringing actions . . . is to deny the validity of patents in crops,” and if courts wished “to deny the validity of patents in plants, courts can construe the patent statutes to exclude plants from patentable subject matter”); *Monsanto Co. v. Dawson*, No. 4:98CV2004, 2000 WL 33953542, at *2 (E.D. Mo. Nov. 24, 2000) (neglecting to discuss harvesting as a making as anticipated in § 271(a) but holding that “[t]he planting and harvesting of seeds is clearly a ‘use’ as anticipated in § 271(a),” even where defendant did not sign a licensing agreement and planted Roundup Ready® soybeans).

162. See Sheff, *supra* note 65, at 232. Supracompetitive prices are prices that are generally far higher than those that can be sustained in a competitive market.

second-generation embodiments of Monsanto's seeds, would render exhaustion inapplicable. Unfortunately, Sheff's suggestion leaves untouched the difficulties particular to patents on living things that reproduce independently, such as the current inability of the end user to freely utilize natural aspects of the organism without the intention or desire to exploit the patented biotechnology aspects of the same organism.

Addressing this concern, Douglas Fretty, drawing on the work of Tempe Smith, who examined the antitrust implications of Monsanto's Technology Agreements,¹⁶³ endorses creating a license reform that accepts Monsanto's rights as exhausted with respect to the second-generation seeds but also creates a rule that preserves the patentee's rights to the *exploitation* of its patents.¹⁶⁴ This suggestion was inspired by royalty schemes that Monsanto employs in other countries where the company receives fees from farmers who are permitted to save seed but who continue to exploit and use the technology.¹⁶⁵

As it stands now, where there are alternative uses, a use necessitating the replication of a patented technology is an inexhaustible use construed as a making.¹⁶⁶ Professor Rogers persuasively argues that the *Bowman* Court actually created a new, technology-specific doctrine of patent exhaustion called the "inexhaustible right to exclude reproduction."¹⁶⁷ Although the Court arguably did create a new patent right for holders of patents on self-replicating organisms, more broadly *Bowman* will likely be applied to future cases involving other self-replicating technologies to support the proposition that uses requiring replication, or copying, are themselves inexhaustible.

Recognizing a right of exploitation, therefore, would allow farmers to be unencumbered property owners of their seeds and would also protect Monsanto's patent rights. Under this scheme, if Monsanto retains the right to exploit its technology, *Bowman* would have full property rights in his commodity soybean seeds, but no property rights in Monsanto's patented technology. And because *Bowman* exploited Monsanto's technology using the patented glyphosate-resistant trait, a court can still find that he infringed Monsanto's patent rights. Importantly, a rule like this, focusing on exploitation of the technology rather than using/making the seed, separates

163. See Smith, *supra* note 76.

164. See Douglas Fretty, *Both a License and a Sale: How to Reconcile Self-Replicating Technology with Patent Exhaustion*, 5 J. BUS. ENTREPRENEURSHIP & L. 1, 11 (2011).

165. See Smith, *supra* note 76, at 641.

166. See *supra* Part III.

167. See Rogers, *supra* note 2, at 445.

aspects of a living organism that are patented biotechnology from aspects of the organism, like its ability to germinate, that are products of nature.¹⁶⁸

As self-replicating technologies become more common or even more complex, it is not difficult to imagine situations in which end users would be guilty of infringement but completely unaware that their purchased products contained patented technologies they did not intend to use. In addition to the unsuspecting end user, the Court's ruling also exacerbates the liability concerns for accidental infringers, like organic farmers, who without exploitation of Monsanto's technology are not only liable for infringement, but also incur property damage because of the infringement. Beyond the scope of this Note is a discussion of remedies and causes of action available to victims suffering property damage as a result of field contamination.¹⁶⁹ Part V limits its discussion to how creating a right-to-exploit rule would avoid the liability risks seeds create through their ability to contaminate fields by cross-pollination, the comingling of tainted equipment during harvest, seed drift or scatter, and volunteer plants.

V. ACCIDENTAL INFRINGERS AND ORGANIC FARMING

Although self-replicating technologies can be living and non-living (e.g., software),¹⁷⁰ a concern specific to seeds is field contamination.¹⁷¹ Motivated by fears of liability and economic loss, a group of seventy-three organic farmers recently sought a declaratory judgment that Monsanto could not sue them if their fields become contaminated.¹⁷² This case highlights a newly problematic area of patent law: infringement liability for "users" of patented

168. See generally *Diamond v. Chakrabarty*, 447 U.S. 303, 315 (1980).

169. See *supra* note 16.

170. Problems presented by *Bowman* can be similar for owners of intellectual property rights in self-replicating computer programs sometimes referred to as "quines." See Loney, *supra* note 8, at 955–56.

171. Elsewhere, this concern is incorrectly described using the phrase "genetic drift." See, e.g., Anthony Shadid, *Genetic Drift Threatens US Organic Farmers*, ORGANIC CONSUMER ASSOCIATION, <http://www.organicconsumers.org/Organic/geneticdrift.cfm> (last visited Nov. 20, 2013) (equating GMO contamination to genetic drift). This Note refrains from using the phrase genetic drift to describe field contamination or cross-pollination. Genetic drift is a complex biological concept, and it is primarily used to describe statistical fluctuations in allele frequency resulting from random sampling error in the choice of gametes. See Christine A. Andrews, *Natural Selection, Genetic Drift And Gene Flow Do Not Act In Isolation In Natural Populations*, 3 NATURE EDUCATION KNOWLEDGE 5 (2010), available at <http://www.nature.com/scitable/knowledge/library/natural-selection-genetic-drift-and-gene-flow-15186648>.

172. See *Organic Seed Growers & Trade Ass'n v. Monsanto Co.*, 718 F.3d 1350 (2d Cir. 2013).

goods who have no idea they are even in possession of a good that might be patented.

For Bowman, it was clear that he was trying to utilize Monsanto's patented technology without compensating Monsanto. However, the current doctrine does little to protect innocent and ignorant infringers from liability. Establishing a patent exhaustion rule focused on exploitation would better shield these accidental infringers, while purposeful or willful infringers (like Bowman) would remain liable. This alternative is especially helpful because an organic farmer has no way of identifying infringing plants without applying pesticides to her crop and destroying its value.¹⁷³

The prevalence of organic farming has grown quickly in the United States since the 1990s.¹⁷⁴ From 1992 to 2008, the increase in certified organic acreage was more than four-fold.¹⁷⁵ The economic losses that these farmers can incur due to contamination are quite large. For example, in 1998, a certified organic farm in Texas was contaminated by cross-pollination from a neighboring field of GM corn.¹⁷⁶ The contamination was not discovered until the corn had been processed and shipped to Europe as organic tortilla chips.¹⁷⁷ "When DNA testing revealed traces of GM corn in the chips, the entire shipment of 87,000 bags—valued at \$500,000—was rejected and destroyed."¹⁷⁸ Not only does field contamination cause market restrictions for organic farmers,¹⁷⁹ it results in lowered prices for the crop, and the possibility of losing organic certification.¹⁸⁰

The National Organic Program of the U.S. Department of Agriculture excludes production from certification if there are "methods used to

173. These concerns should be compelling because intellectual property policy has traditionally sought to strike a "balance between incentives or rewards to creators *and* the interest" of the public (users, consumers and competitors). Keith Aoki, *Neocolonialism, Anti-Commons Property, and Biopiracy in the (Not-so-Brave) New World Order of International Intellectual Property Protection*, 6 IND. J. GLOBAL LEGAL STUD. 11, 27 (1998).

174. See Hikaru H. Peterson et al., *The Motivation for Organic Grain Farming in the United State: Profit, Lifestyle or the Environment*, 44 J. AGRICULTURAL & APPLIED ECON. 2 (2012), available at <http://ageconsearch.umn.edu/bitstream/123783/2/jaae432.pdf>.

175. *Id.*

176. Repp, *supra* note 16, at 591.

177. *Id.*

178. *Id.* Luckily for the organic farmer, the tortilla chip manufacturer decided not to seek damages and, instead, joined Greenpeace and the Center for Food Safety as plaintiffs in a lawsuit filed against the EPA. *Id.*

179. Many European countries have blocked imports of GM crops. See *supra* note 14.

180. See *Langan v. Valicopters, Inc.*, 567 P.2d 218 (Wash. 1977) (finding a substantial economic loss for a farmer who lost his certification after trace amounts of pesticides were found on his crops). This is a high risk for farmers that engage in production for the purpose of becoming organic seed suppliers. See Kershner, *supra* note 16, at 605.

genetically modify organisms or influence their growth . . . by means that are not possible under natural conditions.”¹⁸¹ And “[o]nce an organic farmer learns of the inadvertent presence of transgenic crops, the organic farmer has the obligation to take responsible steps to avoid the contact.”¹⁸² However, a farmer is unlikely to be able to visually distinguish her crops from GM crops. To identify infringing crops, she would probably have to use the same test that the Monsanto investigators use: spraying her crops with Roundup®. By diligently trying to avoid a patent infringement claim or ensuring her field is clear of GM crops, the farmer is forced to destroy her property, and consequently threaten her livelihood.

Rather than construing Bowman’s actions as an impermissible *making*, if Bowman’s actions were instead construed as an impermissible *exploitation* of the trait specific to the patented good, the solution to the liability problem for the accidentally infringing farmer could be resolved without drastically rethinking the standard of liability for patent infringement.¹⁸³ Distinct from the addition of an intent standard for infringement of seeds, exploitation of a patent could mean only that there was some benefit to the infringer from possession, whether purposefully or accidentally, of the GM organism.¹⁸⁴ This suggestion further avoids a rule that requires courts to peer into the subjective motives of a defendant. Admittedly, this suggestion is only a minor improvement for farmers like those in *Organic Seed Growers & Trade Association*, because organic farmers that fall victim to field contamination still suffer significant property damage. At the very least, a rule focused on exploitation prevents adding insult to injury as it insulates these farmers from patent infringement liability.

181. 7 C.F.R. § 205.2 (2013).

182. See Kershen, *supra* note 16, at 609 (citing comments to Section 205.2).

183. See Hilary Preston, Note, *Drift of Patented Genetically Engineered Crops: Rethinking Liability Theories*, 81 TEX. L. REV. 1153, 1153 (2003) (arguing that courts should adopt an intent-to-acquire element for patents involving patented plants.) It has been argued that an actual knowledge standard should apply when the possibility of liability for “innocent” infringing seems particularly troubling. One example is an action against selling users who may lack knowledge that the manufacturer has infringed another’s patents. Roger D. Blair & Thomas F. Cotter, *An Economic Analysis of Seller User Liability in Intellectual Property Law*, 68 U. CIN. L. REV. 1, 15–27 (1999).

184. An example would be contamination on a pesticide-free farm by a plant engineered to be heartier than natural plants. This farmer, with no certification or markets to lose, would have benefitted from the heartier GM plants.

VI. CONCLUSION

The patents at issue in *Bowman* expire in 2014, after which Monsanto will not be enforcing its technology licenses.¹⁸⁵ Once these patents expire, farmers will be free to plant and save these GM seeds without licensing from Monsanto. Although this may obviate the worry over accidental infringers of Monsanto's Roundup Ready® soybeans and the property rights of end users, it is unlikely that the challenges posed by self-replicating technologies will end here. The *Bowman* Court expressly narrowed its holding to the facts at hand, but appeared to be alert to the consequences of its ruling, not just for the value of Monsanto's soybean patents, but also for technologies like cell lines, software, and vaccines. Self-replicating technologies, by their nature, easily "destabilize" the make/use distinction.¹⁸⁶ But a rule focused on the exploitation of a patentable trait, as suggested here, is more easily realized and provides a more favorable rule for the public, as consumers, users, and competitors.

185. Andrew Pollack, *As Patent Ends, a Seed's Use Will Survive*, N.Y. TIMES, Dec. 18, 2009, at B3.

186. Sheff, *supra* note 65, at 238.

COMPETITION AHEAD? THE LEGAL LANDSCAPE FOR REVERSE PAYMENT SETTLEMENTS AFTER *FEDERAL TRADE COMMISSION V. ACTAVIS, INC.*

Allison A. Schmitt[†]

In 2006, pharmaceutical company Cephalon, holder of both an active ingredient patent and a narrow formulation patent for the sleep-disorder drug Provigil, faced competition from four generic manufacturers seeking to enter the market with generic competitors to Provigil.¹ Although the active ingredient patent provided protection (and successfully prevented generic entry on this compound past patent expiration in 2001), the formulation patent, issued after the active ingredient patent, appeared to be an easy target to design around.² The four generic companies planned to enter the market in June 2006.³ To avoid the litigation threat posed by the generic companies, Cephalon settled by paying them a total of more than \$200 million combined.⁴ In exchange the generic manufacturers agreed to delay entry into the market until April 2012.⁵ The Cephalon CEO stated that this deal provided “six more years of patent protection. That’s \$4 billion in sales that no one expected.”⁶

Settlements such as the agreement described above are known as either “reverse payment settlements” (“RPS”) or “pay-for-delay settlements.”⁷ These settlements establish a pecuniary relationship between brand-name and generic manufacturers in which the brand-name company pays the generic firm to delay entry into the market until a specific date.⁸ Reverse payment settlements may take several forms and in some cases may include

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1. Michael A. Carrier, *Provigil: A Case Study of Anticompetitive Behavior*, 3 HASTINGS SCI. & TECH. L. J. 441, 441–42 (2011).

2. *Id.* at 442.

3. *Id.* at 443.

4. *Id.* at 444.

5. *Id.*

6. John George, *Hurdles Ahead for Cephalon*, PHILA. BUS. J. (Mar. 20, 2006), <http://www.bizjournals.com/philadelphia/stories/2006/03/20/story1.html?page=all>.

7. C. Scott Hemphill, *Paying for Delay: Pharmaceutical Patent Settlement as a Regulatory Design Problem*, 81 N.Y.U. L. REV. 1553, 1553 (2006).

8. *Id.* at 1557.

terms with other legitimate uses, not related to the delay of generic entry.⁹ However, such settlements have been extensively litigated in the courts on antitrust grounds because they may allow invalid patents to restrict competition unfairly.¹⁰ By restricting competition, reverse payment settlements may often significantly increase consumer prices for pharmaceutical drugs.¹¹

In June 2013, the Supreme Court decided *Federal Trade Commission v. Actavis, Inc.*, holding that under the Hatch-Waxman statutory framework, the parties entering into reverse payment settlements may have antitrust liability if the payments are designed to delay competition between a brand-name and a generic pharmaceutical manufacturer.¹² Under this ruling, the Supreme Court ordered lower courts to apply a modified antitrust rule-of-reason standard to reverse payment settlements, independent of examinations of the validity of the relevant patents.¹³ Although reverse payment settlements are not presumptively unlawful under *Actavis*, “the likelihood of a reverse payment bringing about anticompetitive effects depends upon its size, its scale in relation to the payor’s anticipated future litigation costs, its independence from other services for which it might represent payment, and the lack of any other convincing justification.”¹⁴

In essence, the ruling mandates that lower courts should apply the modified rule-of-reason standard rationale of *Actavis*, independent of patent validity examinations in situations when a reverse payment settlement is challenged.¹⁵ The Court asserts that patent validity is “normally not necessary to litigate” antitrust liability,¹⁶ but the validity of a patent does seem to have some relevance to the antitrust question if secondary,¹⁷ potentially weaker

9. *Id.* at 1561–62.

10. *Id.* at 1557.

11. For a recent review of the effects of pay-for-delay settlements on the cost of twenty drugs to consumers, see U.S. PIRG & COMMUNITY CATALYST, TOP TWENTY PAY-FOR-DELAY DRUGS: HOW DRUG INDUSTRY PAYOFFS DELAY GENERICS, INFLATE PRICES AND HURT CONSUMERS (July 2013) (stating that up to 142 brand-name drugs have been delayed since 2005 and detailing the effects of these delays on consumers).

12. *FTC v. Actavis, Inc.*, 133 S. Ct. 2223, 2225–26 (2013).

13. *Id.* at 2237.

14. *Id.*

15. *Id.* at 2238.

16. *Id.* at 2226.

17. Typically, secondary patents “provide regulatory protection to ancillary aspects of drug innovation—such as particular drug formulations and compositions—beyond the core, traditional protection, a patent on a novel active ingredient.” C. Scott Hemphill & Bhaven N. Sampat, *Drug Patents at the Supreme Court*, 339 SCI. 1386, 1386 (2013).

patents are less likely to be valid and thus more likely to be challenged in a patent litigation action.¹⁸

Although this ruling provides some guidelines to lower courts, brand-name pharmaceutical companies, and generic pharmaceutical companies in terms of the potential presence of antitrust liability, the holding of this case is limited and does not provide a concrete legal standard. It is thus likely that district courts and courts of appeal will interpret the holding of *Actavis* in different ways, producing another circuit split. As litigation regarding pay-for-delay settlements took nearly fifteen years to reach the Supreme Court,¹⁹ it may take a similarly long time for this potential inconsistency to be resolved across jurisdictions. However, the ruling provides restrictions on unfair competition concerning brand-name and generic pharmaceutical manufacturers. These restrictions may benefit consumers by addressing situations where reverse payment settlements actually do hinder competition, as not every settlement may be anticompetitive. On the other hand, analyzing the net competitive effects of a particular settlement also requires consideration of the benefits of avoiding litigation.

This Note reviews the relevant background relating to the Hatch-Waxman Act and antitrust liability in the context of the *Actavis* decision itself.²⁰ Accordingly, Section I.A reviews the Hatch-Waxman Act, as well as policy rationales for the development of the Act, while Section I.B discusses reverse payment settlements and how they are a result of the Hatch-Waxman framework. Section I.C addresses potential sources for antitrust liability in reverse payment settlements under Hatch-Waxman, including a review of how these standards applied to the settlement at issue in *Actavis*. Section I.D reviews *Actavis*'s path to the Supreme Court in the context of the antitrust principles authorizing the Federal Trade Commission ("FTC") to sue in this case. Finally, Part II reviews and analyzes the Supreme Court's majority and dissenting opinions.²¹

18. *See id.* at 1387.

19. *Schering-Plough*, the first major case to be heard on reverse payment settlements before a circuit court, began as a 2001–2002 Federal Trade Commission inquiry into the settlement between Schering-Plough, Upsher-Smith Laboratories, and American Home Products, in 1997. *Schering Plough Corp. et al.*, F.T.C. no. 9297 (Jun. 27, 2002). The first major wave of reverse payment settlements occurred between 1993 and 2000, and was halted by increased FTC antitrust enforcement activity. C. Scott Hemphill, *An Aggregate Approach to Antitrust: Using New Data and Rulemaking to Preserve Drug Competition*, 109 COLUM. L. REV. 629 (2009); C. Scott Hemphill, *Drug Patent Settlements Between Rivals: A Survey* 3–4 (Columbia Law School, Working Paper, 2007), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=969492.

20. *See infra* Part I.

21. *See infra* Part II.

Since the Supreme Court issued its decision in *Actavis*, the FTC and private litigants have brought forth several pay-for-delay cases in federal courts.²² These cases raise a number of issues regarding the valuation of a payment and types of payments permissible under *Actavis* that were not considered in the Supreme Court's decision. Part III reviews these cases and other likely applications of the *Actavis* doctrine in reverse payment settlements.

In addition, the FTC has indicated its intention to aggressively pursue pay-for-delay settlements that it believes may potentially violate antitrust laws.²³ As such, any regulatory scheme involving the FTC would need to account both for the expertise of that agency in these types of settlements, as well as the need for strong guidance in agency decisions.²⁴ Congress also currently is considering two pending bills focusing on pay-for-delay settlements.²⁵ Although a bill asserting the presumptive illegality of these arrangements may not achieve all of the public policy goals for RPSs, a bill removing some incentives for generics to sue brand-name companies in situations where the patent is probably valid may aid in eliminating sham litigation in RPSs. Part IV discusses these provisions in further detail, along with potential mechanisms by which Congress could enhance the framework of Hatch-Waxman to avoid reverse payment settlements without impeding legitimate settlements.

I. DEVELOPMENT OF *ACTAVIS* TO THE SUPREME COURT: THE HATCH-WAXMAN ACT, REVERSE PAYMENT SETTLEMENTS, AND SOURCES OF ANTITRUST LIABILITY

Reverse payment settlements arise from the complex pharmaceutical regulatory framework laid out by the Hatch-Waxman Act. First, Section I.A looks at the origins of the Hatch-Waxman Act, as well as policy rationales for the development of the Act, and Section I.B reveals how reverse payment settlements are logical results of loopholes in the Hatch-Waxman framework. Using the litigation in *Actavis* as an example, Section I.C describes how antitrust liability may arise in reverse payment settlements under Hatch-

22. *See infra* Part III.

23. *See infra* Part IV.

24. *See infra* Part IV.

25. Preserve Access to Affordable Generics Act, S. 214, 113th Cong. (2013); Fair and Immediate Release of Generic Drugs Act ("FAIR Generics Act"), S. 504, 113th Cong. (2013).

Waxman. Finally, Section I.D provides the contextual history of *Actavis's* path to the Supreme Court, using the principles described in this Part.

A. THE HATCH-WAXMAN ACT: REGULATING INTERACTIONS BETWEEN BRAND-NAME AND GENERIC MANUFACTURERS AND POLICY RATIONALES

The Drug Price Competition and Patent Term Restoration Act of 1984 (commonly known as the Hatch-Waxman Act) aims to regulate disputes between manufacturers of generic and brand-name pharmaceuticals in the United States and also to promote competition between brand-name and generic manufacturers to benefit the consumer.²⁶ The Hatch-Waxman Act provides the framework in which manufacturers of pharmaceuticals must operate to obtain approval for marketing compounds within the United States.²⁷ First, brand-name pharmaceutical inventors must submit a New Drug Application to the federal Food and Drug Administration (“FDA”) and then subsequently complete a testing process to demonstrate the safety and effectiveness of the proposed pharmaceutical prior to marketing it in the United States.²⁸

After the FDA has given approval for the brand-name drug in question, generic manufacturers seeking to obtain approval for marketing of a generic compound may file an Abbreviated New Drug Application (“ANDA”) to the FDA.²⁹ In this application, the FDA requires that generic drug manufacturers provide certification that the generic is biologically equivalent to the brand-name drug and that the generic contains the same active ingredients as the brand-name drug,³⁰ as well as a “Paragraph IV” certification that either the generic product does not infringe on the brand-name drug or that the patent(s) on the brand-name drug are invalid or unenforceable.³¹

Importantly, the Hatch-Waxman Act also provides protocol for patent disputes arising from FDA approvals. The brand-name pharmaceutical manufacturer is required to provide a list of relevant patents and their

26. Drug Price Competition and Patent Term Restoration Act of 1984, Pub. L. 98-417, 98 Stat. 1585 (1984) (codified at 21 U.S.C. §§ 355, 360cc; 35 U.S.C. §§ 156, 271), *amended by* Medicare Prescription Drug, Improvement, and Modernization Act of 2003, Pub. L. No. 108-173, 117 Stat. 2066 (2003) (collectively, the “Hatch-Waxman Act”).

27. *Id.*

28. 21 U.S.C. § 355(b)(1) (2012).

29. *Id.* § 355(j)(2)(A)(i)–(iv).

30. *Id.*

31. “Paragraph IV” refers to the relevant section of the Hatch-Waxman Act. *Id.* § 355(j)(2)(A)(vii)(IV).

expiration dates in the New Drug Application.³² Conversely, generic manufacturers are required to certify in their ANDA applications that their drugs do not infringe said brand-name patents.³³ This certification process often leads to patent infringement and patent invalidity disputes.³⁴ The Hatch-Waxman Act also specifies a timing regime for generic approval, pending resolution of any validity or infringement litigation pursuant to the ANDA application.³⁵

Finally, the Hatch-Waxman Act provides a major incentive for generic manufacturers to be the first-to-file an ANDA application. Through the “Paragraph IV” route, first-to-file generic manufacturers receive a 180-day exclusive right to market their drugs over other generic manufacturers.³⁶ This exclusivity right in effect establishes a duopoly between the brand-name and the first-to-file generic manufacturer, and it can often be extremely lucrative for the generic manufacturer.³⁷ The framework of the Hatch-Waxman Act enforces the public policy goals of the statute, as discussed in the next Section.

1. *Legislative History and Policy Underlying the Hatch-Waxman Act*

Henry Waxman, one of the original sponsors of the Act, stated that the Act was “intended to protect consumers against excessive drug costs by enhancing competition between brand-name and generic drug

32. *Id.* § 355(b)(1).

33. *Id.* § 355(j)(2)(A)(vii)(IV). This certification can be provided in one of several ways: by certifying that the brand-name manufacturer has not asserted valid patents, by certifying that relevant patents have already expired, or by certifying that any relevant patent the brand-name manufacturer has listed “is invalid or will not be infringed by the manufacture, use or sale” of the pharmaceutical compound described in the generic manufacturer’s ANDA. *Id.*

34. *See, e.g.,* Caraco Pharm. Lab., Ltd. v. Forest Labs., Inc., 527 F.3d 1278 (resolving a patent validity dispute); Bayer AG v. Pharm. Research Corp., 212 F.3d 1241 (holding that the patent at issue was not infringed by the generic company’s ANDA).

35. 21 U.S.C. § 355(j)(5)(B)(iii) (2012).

36. *Id.* § 355(j)(5)(B)(iv).

37. *See* Hemphill, *supra* note 7, at 1588–94. The vast majority of a generic company’s profits on a generic drug come during the exclusivity period before other generics enter the market to force down prices. *Id.* In analyzing a broad range of pharmaceutical patent litigation decisions from 1984 to 2012, Jacobo-Rubio and coworkers have determined that brand-name firms value deterrence of generic entry to the market at \$3.9 billion, while generic companies value their right to enter at \$748.6 million, thereby outlining some of the motivation behind settlements for each side. Ruben Jacobo-Rubio et al., *The Private Value of Entry and Deterrence in the US Pharmaceutical Industry* (Dep’t of Econ., Univ. of Ga., Working Paper, 2014), available at http://ruben1.myweb.uga.edu/value-entry-deterrence_Jan-11-2014.pdf.

manufacturers.”³⁸ The 2003 Medicare Amendments to the Hatch-Waxman Act confirmed this procompetitive policy.³⁹

The drafters of the Hatch-Waxman Act also likely envisioned patent disputes arising under the Act as a method of encouraging private parties (generic manufacturers) to sue brand-name companies to invalidate sham patents, thereby encouraging competition.⁴⁰ However, under the Hatch-Waxman regime, generics are incentivized to sue brand-name manufacturers even if the generic company thinks it likely that the brand-name company will prevail in litigation, because the potential benefit of invalidating a patent (and thus gaining entry to the market prior to patent expiration) is so high.⁴¹ Remarkably, the Intellectual Property Owners Association has cited studies indicating that for more than ninety percent of branded drug sales, a generic challenger balancing upside gain under the Hatch-Waxman Act against downside risk from litigation costs can justify a litigation challenge to a brand-name patent if it believes it has a very low chance of success.⁴² As such, the structure of the Hatch-Waxman Act provides generic manufacturers a low-risk path to enter the market by suing their competitors. Although the brand-name patents may not withstand scrutiny and thus may be invalidated, thereby enhancing competition and benefitting consumers, the Patent and Trademark Office’s (“PTO”) current review mechanisms and resources cannot adequately verify the validity of all patents upon issuance, therein forcing expensive litigation to invalidate weak patents.⁴³

B. REVERSE PAYMENT SETTLEMENTS: ONE RESULT OF THE HATCH-WAXMAN FRAMEWORK

In the process of litigating a patent validity or infringement action under the Hatch-Waxman Act, in certain situations the parties may be incentivized to settle the dispute. One common way in which generic and brand-name

38. Brief for Rep. Henry A. Waxman as Amicus Curiae Supporting Petitioner at 11, *FTC v. Actavis, Inc.*, 133 S. Ct. 2223 (2013) (No. 12-416).

39. *Id.* at 14.

40. Brief for the Intellectual Property Owners Association as Amicus Curiae Supporting Respondents at 25, *FTC v. Actavis, Inc.*, 133 S. Ct. 2223 (2013) (No. 12-416).

41. *Id.* at 14.

42. *Id.* at 14–15. The brief argues that “for more than 90% of branded drug sales (measured in dollars), a generic challenger balancing upside gain under Hatch-Waxman against downside risk limited to litigation costs can justify the challenge if it believes it has at least a 1.3% chance of success.” *Id.* at 15 (citing Kelly Smith & Jonathan Gleklen, *Generic Drugmakers Will Challenge Patents Even When They Have a 97% Chance of Losing: The FTC Report that K-Dur Ignored*, CPI ANTITRUST CHRON., no. 2, Sept. 2012, available at <http://bit.ly/VMMTTS>).

43. See *infra* Section IV.A.

manufacturers have settled such actions is with an RPS, in which the brand-name innovator provides a monetary payment to the generic manufacturer, and the generic company agrees to end the litigation.⁴⁴ RPSs typically include a promise by the generic company not to market the generic compound against the brand-name product for a certain period of time.⁴⁵ The pay-to-delay mechanism in effect extends the right of a patent owner to exclude others from the market by paying competitors to remove themselves for a period of time. Oftentimes, these settlements block several competitors from competing, as the brand-name company will pay most or all generic companies that filed ANDAs within a certain period of time.⁴⁶ However, generic companies are disincentivized from suing if another generic company has already become the first-to-file because the 180-day exclusivity period is no longer available to subsequent challengers. Therefore, these settlements create Hatch-Waxman loopholes that may frustrate the policy purposes of the Act.

Early RPSs followed a model in which brand-name companies paid generic companies cash payments to delay their entry into a particular market, but subsequent settlements (since the mid-2000s or so) have typically been much more complicated.⁴⁷

The *Actavis* case clearly demonstrates the application of the Hatch-Waxman framework to produce an RPS that includes both cash payments and other forms of consideration, namely co-marketing agreements between brand-name and generic companies.⁴⁸ Brand-name pharmaceutical manufacturer Solvay Pharmaceuticals filed a New Drug Application with the

44. Peter Todaro et al., *A Post-Actavis Approach to Reverse Payment Settlements*, LAW360 (Jul. 31, 2013, 3:00 PM), <http://www.law360.com/articles/459510/a-post-actavis-approach-to-reverse-payment-settlements>.

45. *Id.* The period of time typically depends on the negotiation between the parties. Because only the first-to-file generic company may receive the 180-day exclusivity benefit, these agreements effectively discourage other generic companies from seeking to enter the market. *See id.*

46. *See* FTC v. Actavis, Inc., 133 S. Ct. 2223, 2229 (2013).

47. *See, e.g.*, Hemphill, *An Aggregate Approach*, *supra* note 19; Hemphill, *Drug Patent Settlements*, *supra* note 19, at 1–49. Common terms in modern reverse payment settlement agreements include additional contract terms, agreements regulating other pharmaceutical products, or the lack of cash used as consideration. Other provisions may include an intellectual property license, supply and distribution agreements, or co-promotion of brand-name products. One particular type of agreement under current investigation in several pending actions is the no authorized generic (“No-AG”) agreement, in which the brand name company agrees to not market its own generic brand against a generic manufacturer’s product. Hemphill, *Drug Patent Settlements*, *supra* note 19, at 13–21.

48. *Actavis*, 133 S. Ct. at 2229.

FDA for the compound AndroGel, a testosterone-based drug, in 1999.⁴⁹ The FDA subsequently approved the marketing of the compound in 2000.⁵⁰ Pursuant to the requirements of the Hatch-Waxman Act, Solvay disclosed a relevant patent to the FDA in 2003.⁵¹ Generic manufacturer Actavis submitted an ANDA application for a compound related to AndroGel later that year, as did Paddock Laboratories.⁵² Both generic companies certified under Paragraph IV of the Hatch-Waxman Act that their compounds did not infringe Solvay's patent because "Solvay's listed patent was invalid."⁵³ To complicate the matter, Par Pharmaceuticals—another generic manufacturer—made an agreement with Paddock Laboratories to share litigation costs in exchange for a split of profits, should Paddock's application be approved by the FDA.⁵⁴

In 2003, Solvay filed suit against Actavis and Paddock under Paragraph IV of the Hatch-Waxman Act.⁵⁵ The FDA then approved Actavis's first-to-file generic application for AndroGel after a thirty-month stay in early 2006.⁵⁶ Later in 2006, all parties settled the dispute using a reverse payment settlement.⁵⁷ Actavis (and other generic manufacturers) agreed to not market its generic compound until August 31, 2015 (sixty-five months before the AndroGel patent's expiration), and in exchange Solvay agreed to pay tens of millions of dollars to each participating generic manufacturer, at least \$243 million in total.⁵⁸ Finally, Solvay agreed with all generic companies to co-promote brand-name AndroGel to urologists, while splitting any profits obtained from this business endeavor.⁵⁹

Courts generally encourage settlements in litigation actions to promote judicial efficiency.⁶⁰ However, reverse payment settlements may have the effect of raising costs for consumers, reflected in pharmaceutical prices

49. *FTC v. Watson Pharms., Inc.*, 677 F.3d 1298, 1304 (11th Cir. 2012).

50. *Id.*

51. *Actavis*, 133 S. Ct. at 2229.

52. *Id.*

53. *Id.*

54. *Id.*

55. *Id.*; *see also* *Watson Pharms., Inc.*, 677 F.3d 1298, 1304 (11th Cir. 2012).

56. Solvay did not bring suit against Par, however. *Actavis*, 133 S. Ct. at 2229.

57. *Id.*

58. *Id.*

Solvay agreed to pay Actavis between \$19 million and \$30 million a year for nine years, while \$60 million was paid to Par and \$12 million was paid to Paddock. *Id.*

59. *Id.*; *see also* Scott A. Stempel et al., *Eleventh Circuit Rejects FTC Challenge to Reverse Payment Settlement*, MORGAN, LEWIS & BOCKIUS, (May 9, 2012), http://www.morganlewis.com//pubs/Antitrust_LF_11thCircuitRejectsFTCChallenge_09may12.pdf.

60. *See, e.g.*, Randall R. Rader, *The State of Patent Litigation*, 21 FED. CIR. B.J. 331, 345 (2011).

higher than what consumers would pay if generics could enter the market and decrease prices overall. U.S. PIRG, a federation of citizen-funded organizations advocating in the public interest, has estimated that from 2005 through 2011, these settlements have cost consumers over \$98 billion.⁶¹ The FTC and other commentators estimated that consumers and the federal government pay an extra \$3.5 billion to \$12 billion per year cumulatively for pharmaceuticals as a result of reverse payment settlements.⁶² These figures highlight the importance of settlements in the overall economics of pharmaceutical development in the United States, as well as the high probability of consumer harm.

As most recent settlements are not simply an exchange of cash between a brand-name company and a generic manufacturer, determining the antitrust liability in a particular settlement can be a complicated endeavor, and settlements cannot simply be dismissed as anticompetitive.⁶³ Many analyses of the overall benefits of RPSs focus on the use of resources saved from settlements or obtained from settlements towards the development of new compounds. Brand-name pharmaceutical companies play an important role in innovative discovery. Pharmaceutical research is itself serendipitous—it is extremely difficult to predict which experiments or compounds will be successful in laboratory tests, much less in clinical trials. Accordingly, it is extremely difficult to quantify the potential value in terms of research results from adding additional funds to a pharmaceutical development pipeline. Compounding this difficulty is the composition of the modern development pipeline for pharmaceutical compounds, which does not only consist of large pharmaceutical companies, but also potential in-licensing partners as well,

61. U.S. PIRG has analyzed twenty of the estimated 142 drugs impacted by pay-for-delay settlements up to July 2013 and estimated that companies made an extra \$98 billion on these brand-name drugs alone before generic drugs entered the market. U.S. PIRG & COMMUNITY CATALYST, *supra* note 11.

62. The FTC estimates consumers pay an extra \$3.5 billion per year for pharmaceuticals due to reverse payment settlements. Jon Leibowitz, Chairman, FTC, “Pay-for-Delay” Settlements in the Pharmaceutical Industry: How Congress Can Stop Anticompetitive Conduct, Protect Consumers’ Wallets, and Help Pay for Health Care Reform (The \$35 Billion Solution), at 8 (Jun. 23, 2009), *available at* <http://www.ftc.gov/speeches/leibowitz/090623payfordelayspeech.pdf>. But note that in 2011, consumers spent a total of \$245 billion on pharmaceuticals. Brief for Petitioner at 7, *FTC v. Actavis, Inc.*, 133 S. Ct. 2223 (2013) (No. 12-416). Other commentators have estimated higher costs for consumers—up to \$12 billion per year. *Protection Consumer Access to Generic Drugs Act of 2009: Hearing on H.R. 1706 Before the H. Subcomm. on Commerce, Trade, and Consumer Protection*, 111th Cong. 7 (2009) (statement of C. Scott Hemphill, Assoc. Prof., Columbia Law School).

63. *See, e.g.*, Hemphill, *An Aggregate Approach*, *supra* note 19; Carl Shapiro, *Antitrust Analysis of Patent Settlements Between Rivals*, ANTI-TRUST, Summer 2003, at 70.

such as small biotechnology companies and universities in research funds. Through financial support of these in-licensing partners, large pharmaceutical companies support a major portion of the research pipeline today.⁶⁴

Patents are particularly important in pharmacological innovation for several reasons. First, the development of a pharmaceutical compound for consumer use requires an immense investment on the part of the brand-name company.⁶⁵ These compounds typically also require significant investments of time in discovery and development, and the regulatory process to obtain approval is not short either.⁶⁶ Finally, once invented and developed, generic companies generally find it facile to copy the compound and develop generic compounds without the investments required by the brand-name company.⁶⁷ The patent right thus plays an essential role in incentivizing brand-name companies to undertake drug discovery in the first place.

After the enactment of the Hatch-Waxman Act in 1984, the number of “patents per drug roughly doubled for the cohort of drugs approved between 2000 and 2002 compared with drugs approved between 1985 and 1987.”⁶⁸ This change demonstrates, at least in part, that brand-name manufacturers pursued “secondary” patents—patents protecting aspects of pharmaceutical innovation besides the active ingredient itself—as part of their strategy to extend the overall period of time that a particular compound could be protected from competition.⁶⁹

Studies have shown that generic companies target these secondary patents far more frequently in ANDA certifications than the active ingredient patents, likely because generic companies have been much more successful in patent litigations focusing on secondary patents.⁷⁰ Brand-name manufacturers have won almost all disputes on active ingredients but have lost most litigations on secondary patents; moreover, eighty-nine percent of settlements with enough public information to analyze were centered on secondary patents.⁷¹ One can infer from this data that active ingredient patents are more likely than secondary patents to be found valid and

64. For a general discussion of the evolving pharmaceutical landscape, see Iain M. Cockburn, *The Changing Structure of the Pharmaceutical Industry*, 23 HEALTH AFF. 10 (Jan. 2004).

65. Brief for the Intellectual Property Owners Association as Amicus Curiae Supporting Respondents at 7, *FTC v. Actavis, Inc.*, 133 S. Ct. 2223 (2013) (No. 12-416).

66. *Id.*

67. *Id.*

68. Hemphill & Sampat, *supra* note 17, at 1386.

69. *Id.*

70. *Id.* at 1386–87.

71. *Id.* at 1387.

infringed if litigation proceeded to its conclusion, and thus brand-name companies may be incentivized to settle suits on secondary patents because of their relative weakness.⁷²

One major question arising from this data is whether RPSs actually aid innovation, despite manufacturers' arguments that settlements add money to the drug discovery pipeline and thus are procompetitive.⁷³ Opponents of these settlements argue that settling a dispute in this manner is analogous to price fixing and other prohibited exclusionary behavior.⁷⁴ In addition, banning or limiting reverse payment settlements may serve to encourage brand-name manufacturers to focus on developing new compounds, thereby benefiting the consumer base at large, rather than insulating from competition the compounds that have already been developed and marketed.⁷⁵ Overall, it seems likely that eliminating the pay-for-delay settlement framework could prevent brand-name manufacturers from unfairly extending the lifespan of their exclusivity on a compound, particularly if they are using invalid patents as the basis of this exclusivity.

A great deal of the literature on reverse payment settlements has focused on whether such settlements should be legal, including several Notes in past editions of the *Berkeley Technology Law Journal's* Annual Review.⁷⁶ The legality of these settlements depends on the application of provisions of antitrust law; these provisions are reviewed below.

C. POTENTIAL SOURCES FOR LIABILITY UNDER ANTITRUST PROVISIONS: HOW DID *ACTAVIS* REACH THE SUPREME COURT?

Notably, although the reverse payment settlement in the *Actavis* case only included private parties, the FTC brought the suit that eventually reached the Supreme Court.⁷⁷ This Section explores the antitrust law that permits both

72. *Id.*

73. See Brief for Pharmaceutical Research and Manufacturers of America as Amicus Curiae Supporting Respondents at 19–20, *FTC v. Actavis, Inc.*, 133 S. Ct. 2223 (2013) (No. 12-416). These companies argue that the preserved profits fund additional research into new compounds, thereby acting as procompetitive settlements. See *infra* Section I.C for a further discussion of procompetitive and anticompetitive effects of reverse payment settlements.

74. Brief for Petitioner at 51, *FTC v. Actavis, Inc.*, 133 S. Ct. 2223 (2013) (No. 12-416).

75. Hemphill & Sampat, *supra* note 17, at 1386.

76. For some examples of Berkeley Technology Law Journal Annual Review Notes published on this topic, see, for example, Jeff Thomas, Note, Schering-Plough and In re Tamoxifen: *Lanful Reverse Payments in the Hatch-Waxman Context*, 22 BERKELEY TECH. L.J. 13 (2007); Larissa Burford, Note, In re Cardizem & Valley Drug Co.: *The Hatch-Waxman Act, Anticompetitive Actions, and Regulatory Reform*, 19 BERKELEY TECH. L.J. 365 (2004); Julia Rosenthal, Note, *Hatch-Waxman Use or Abuse? Collusive Settlements Between Brand-Name and Generic Drug Manufacturers*, 17 BERKELEY TECH. L.J. 317 (2002).

77. *FTC v. Actavis, Inc.*, 133 S. Ct. 2223 (2013).

the FTC and private parties to bring challenges against potentially collusive activities such as reverse payment settlements.

In 1890, Congress passed the Sherman Act to prohibit “restraint[s] of trade or commerce among the several States.”⁷⁸ In 1914, Congress approved the Clayton Act, which permits consumers to sue business entities under its provisions to prohibit acquisitions whose effects “may be substantially to lessen competition or to tend to create a monopoly.”⁷⁹

The Federal Trade Commission may also become involved in monitoring and litigating against unfair settlements. The FTC, an independent governmental agency established in 1914 by the Federal Trade Commission Act,⁸⁰ promotes consumer protection and the prevention of anticompetitive business practices.⁸¹ The FTC Act empowered the FTC to investigate and stop certain behaviors that violate the Sherman and Clayton Acts.⁸²

Currently, the FTC plays a large role in monitoring and, in some cases, litigating against parties involved in reverse payment settlements under its authority from the Medicare Prescription Drug & Improvement Act, which requires pharmaceutical companies to file documentation of RPSs with the FTC and the Department of Justice within ten days of execution.⁸³ This Act applies to all settlements executed after January 7, 2004 between brand-name and generic companies involving an ANDA, as well as RPSs between two generic companies.⁸⁴

Private parties and the FTC are both authorized to bring suits against putatively illegal collusive settlements under the Sherman Act.⁸⁵ The rationale in all of these litigations is that the FTC is protecting consumers-at-large from illegal splitting of monopoly profits. Most relevant to *Actavis*, the FTC has challenged these arrangements as illegal or presumptively unlawful since the late 1990s under its authority to challenge activities in violation of Section

78. Sherman Antitrust Act, 15 U.S.C. §§ 1–7 (2012).

79. 15 U.S.C. § 18.

80. 15 U.S.C. §§ 41–58.

81. *About the FTC*, FTC, <http://www.ftc.gov/about.shtm> (last visited Oct. 25, 2013).

82. *See* *FTC v. Brown Shoe Co.*, 384 U.S. 316, 322 (1966) (“[The FTC can] arrest trade restraints in their incipiency without proof that they amount to an outright violation of § 3 of the Clayton Act or other provisions of the antitrust laws.”). Although the FTC brought the *Actavis* suit, the Department of Justice’s Antitrust Division may bring similar suits under the provisions of the Sherman and Clayton Acts. 15 U.S.C. § 15(a) (2012).

83. Federal Trade Commission Act (“FTC Act”), Ch. 311, §5, 38 Stat. 717 (codified at 15 U.S.C. §45(a) (2012)); *see also* Medicare Prescription Drug, Improvement, and Modernization Act of 2003, Pub. L. No. 108-173, § 1112, 117 Stat. 2066, 2461–63 (2003).

84. Medicare Prescription Drug, Improvement, and Modernization Act of 2003, Pub. L. No. 108-173, § 1112, 117 Stat. 2066, 2461–63 (2003).

85. Sherman Antitrust Act, 15 U.S.C. §§ 1–7 (2012).

1 of the Sherman Act.⁸⁶ In the early 2000s, companies ceased using settlements as a tool to end litigation proceedings or to deal with other disputes between companies due to the FTC's active enforcement, but between 2005 and 2013 (after *Schering-Plough* but before *Actavis*), many courts favored settling disputes between the brand-name and generic manufacturers rather than promoting litigation.⁸⁷

1. *Conflicting Policy Doctrines of Patent Law and Antitrust Law*

Reverse payment settlements raise important questions relating to the intersection of patent law and antitrust law. The underlying principles of patent law foster innovation by providing patentees with a right to exclude others from practicing an invention within a certain time frame.⁸⁸ Patentees thus have the right to enjoy a limited monopoly (here, on a pharmaceutical compound or class of compounds).⁸⁹ Conversely, antitrust law in its most general sense functions to protect consumer welfare by preventing unfair monopolies.⁹⁰

The major divergence between antitrust and patent law lies in what each doctrine means when using the term “exclusivity.” Antitrust law seeks to police actions that may take place outside of a reasonable competitive sphere, while patents inherently promote exclusivity.⁹¹ Although there have been many efforts to harmonize the relationship between patent and antitrust law policy rationales,⁹² there are still several areas of the law where these rationales conflict—including in the reverse payment framework described in *Actavis*. Courts must determine whether reverse payments fall under the category of “legitimate competition,” or whether they overstep the reasonable bounds of the patent exclusivity right.⁹³

2. *Procompetitive and Anticompetitive Effects of Reverse Payment Settlements*

A large concern in antitrust analysis of reverse payment settlements is whether these settlements are inherently beneficial or harmful to consumer

86. FTC Act, Ch. 311, §5, 38 Stat. 717 (codified at 15 U.S.C. § 45(a) (2012)).

87. *See* *Watson Pharms., Inc.*, 677 F.3d 1298, 1313 (11th Cir. 2012); *In re Ciprofloxacin Hydrochloride Antitrust Litig.*, 544 F.3d 1323, 1332–37 (Fed. Cir. 2008); *In re Tamoxifen Citrate Antitrust Litig.*, 466 F.3d 187, 212–13 (2d Cir. 2006); *Valley Drug Co. v. Geneva Pharms., Inc.*, 344 F.3d 1294, 1304, 1308 (11th Cir. 2003).

88. Robin Feldman, *Patent and Antitrust: Differing Shades of Meaning*, 13 VA. J.L. & TECH. 1, 4 (2008).

89. *Id.*

90. *Id.*

91. Feldman, *supra* note 88, at 1.

92. *See id.*

93. *Id.*

welfare. Unfortunately, this question is not always straightforward and may depend on the specifics of the deal in question. Judicial efficiency may favor patent settlements.⁹⁴ In addition, in some settlements, a generic company may enter the market prior to patent expiration, thereby providing a cost savings to consumers.⁹⁵ Settlements may encourage the clarification of patent rights between parties involved in disputes.⁹⁶ Therefore, in some cases there may be a reasonable argument that a patent settlement is procompetitive.

However, many parties have raised concerns about potential anticompetitive features of these settlements. For example, these settlements may lead to increased costs for consumers if the generic company delays entry into the market.⁹⁷ In situations where a patent is invalid, settlements may prevent legitimate generic entry into the market.⁹⁸ Also, a settlement may be viewed as the sharing of monopoly profits from a strictly economic viewpoint.⁹⁹

D. STANDARDS OF ANTITRUST REVIEW FOR REVERSE PAYMENT SETTLEMENTS AND APPLICATION TO THE *ACTAVIS* LITIGATION

Courts and agencies have considered and utilized three separate standards of antitrust review for reverse payment settlements: the rule-of-reason standard, the per se standard, and the quick-look standard.¹⁰⁰ These standards require different levels of inquiry to determine whether an antitrust violation has occurred.¹⁰¹ As the default standard for analysis of antitrust claims based on restriction of competition, the rule-of-reason analysis requires three conceptual steps that generally lend themselves to complex analysis.¹⁰² First, the plaintiff must demonstrate an “*actual* adverse effect on competition as a whole in the relevant market.”¹⁰³ The market relevant under

94. FTC, *GENERIC DRUG ENTRY PRIOR TO PATENT EXPIRATION: AN FTC STUDY* 25 (2002).

95. *Id.*

96. *Id.*

97. Hemphill, *supra* note 7, at 1557.

98. *Id.*

99. Hovenkamp et al., *Anticompetitive Settlement of Intellectual Property Disputes*, 87 MINN. L. REV. 1719, 1722 (2003).

100. HOVENKAMP ET AL., *IP AND ANTITRUST: AN ANALYSIS OF ANTITRUST PRINCIPLES APPLIED TO INTELLECTUAL PROPERTY LAW* § 15.3 (2013).

101. *Id.*

102. *Id.*; *K.M.B. Warehouse Distribs., Inc. v. Walker Mfg. Co.*, 61 F.3d 123, 127 (2d Cir. 1995).

103. *K.M.B.*, 61 F.3d at 127 (quoting *Capital Imaging Assocs., P.C. v. Mohawk Valley Med. Assocs.*, 996 F.2d 537, 543 (2d Cir. 1993), *cert. denied*, 114 S. Ct. 388 (1993)).

reverse payment settlements is the market for pharmaceutical compounds.¹⁰⁴ The analysis requires an examination of whether harm is not only possible, but likely and significant in the given situation.¹⁰⁵ If the plaintiff successfully demonstrates this effect, the defendant must then demonstrate the procompetitive effects of the settlement in question.¹⁰⁶ Finally, the plaintiff must provide less restrictive alternatives to the settlement if the defendant can successfully show the procompetitive effects of the settlement.¹⁰⁷

The quick-look standard utilizes a “truncated rule-of-reason” approach in which a court is permitted to conduct a more cursory analysis than that required by the rule of reason.¹⁰⁸ As the court is permitted to assume certain portions of the analysis under this standard, it may only be applied when the settlement in question “[is] not per se unlawful but [is] sufficiently anticompetitive on [its] face that [it] do[es] not require a full-blown rule of reason inquiry.”¹⁰⁹

The per se standard may be applied in situations with a “predictable and pernicious anticompetitive effect” as an exception to the rule-of-reason doctrine.¹¹⁰ These situations may be classified as per se illegal “without elaborate inquiry as to the precise harm.”¹¹¹ This standard should be applied in situations where enough experience has accumulated showing that a rule-of-reason analysis would not permit the practice in question.¹¹²

1. *Application to Actavis: District Court and Eleventh Circuit Analysis in FTC v. Watson Pharmaceuticals*

The Federal Trade Commission filed suit against all parties to the AndroGel reverse payment settlement in the Northern District of Georgia in 2009, asserting that all parties violated Section 5 of the Federal Trade

104. *Id.*

105. Geoffrey D. Oliver, *Of Tenors, Real Estate Brokers and Golf Clubs: A Quick Look at Truncated Rule of Reason Analysis*, ANTI-TRUST 40, 40 (Spring 2010).

106. *Id.*

107. *Id.*

108. *Id.*

109. *Cal. Dental Ass’n v. FTC*, 526 U.S. 756, 763 (1999) (quoting *Cal. Dental Ass’n v. FTC*, 128 F.3d 720, 727 (9th Cir. 1997)).

110. *State Oil Co. v. Khan*, 522 U.S. 3, 10 (1997); *see also N. Pac. Ry. Co. v. United States*, 356 U.S. 1, 5 (1958) (“[T]here are certain agreements or practices which because of their pernicious effect on competition and lack of any redeeming virtue are conclusively presumed to be unreasonable and therefore illegal . . .”).

111. *N. Pac. Ry. Co.*, 356 U.S. at 5.

112. *In re Ciprofloxacin Hydrochloride Antitrust Litig.*, 544 F.3d 1323, 1332–37 (Fed. Cir. 2008). For further examples of situations in which quick-look analysis may be appropriate versus per se analysis, *see, e.g., Oliver, supra* note 105.

Commission Act in enacting the reverse payment settlement.¹¹³ Specifically, the FTC argued that Solvay settled with the most likely litigants in a patent infringement dispute to maintain its monopoly unlawfully.¹¹⁴ The district court dismissed the FTC's complaint, stating that the settlement was permissible based on the monopoly power Solvay held as the patent holder.¹¹⁵ The FTC subsequently appealed the decision to the Eleventh Circuit.¹¹⁶

The Eleventh Circuit affirmed the decision of the district court and dismissed the FTC's complaint, stating that "absent sham litigation or fraud in obtaining the patent, a reverse payment settlement is immune from antitrust attack so long as its anticompetitive effects fall within the scope of the exclusionary potential of the patent."¹¹⁷ The court did recognize that generally antitrust laws prohibit payment schemes in which one company effectively pays another to delay entry of competitors into a market, but it held that the presence of a patent in this case allowed the patent holder the "lawful right to exclude others from the market."¹¹⁸ However, because the settlement allowed generic competition before the patent's date of expiration, the court determined that the settlement was within the "scope of the patent" and thus not eligible for antitrust analysis.¹¹⁹

2. *Circuit Split: Rationale for Supreme Court Certiorari?*

The Supreme Court granted certiorari on this matter on December 7, 2012, to resolve the circuit split on the lawfulness of reverse payment settlements that had developed over the preceding nine years.¹²⁰ Table 1 below provides relevant details on the previous reverse payment settlement litigation in several jurisdictions.

Along with the Eleventh Circuit, the Second Circuit and the Federal Circuit agreed that "reverse payment settlements do not violate the antitrust laws unless the exclusionary effects of the settlement exceed the scope of the

113. *See supra* Section I.B; 15 U.S.C. § 45; *see also* *In re Androgel Antitrust Litig.* (No. II), 687 F. Supp. 2d 1371, 1375–76 (N.D. Ga. 2010).

114. *In re Androgel Antitrust Litig.* (No. II), 687 F. Supp. 2d at 1376.

115. *Id.* at 1382.

116. *FTC v. Watson Pharms., Inc.*, 677 F.3d 1298, 1298 (11th Cir. 2012).

117. *Id.* at 1312.

118. *Id.* at 1307.

119. *Id.*

120. *FTC v. Watson Pharms., Inc., cert. granted sub nom, FTC v. Actavis, Inc.*, 133 S. Ct. 787 (2012).

patent at issue.”¹²¹ However, courts may invalidate settlements under the “scope of the patent” test if the PTO granted a patent where the patentee committed fraud, if the patent litigation was a sham, or if the settlement extended beyond the scope of the patent.¹²² Brand-name and generic pharmaceutical companies preferred this standard, as it gave maximum deference to potential settlements between these entities.

Conversely, the Sixth Circuit and Third Circuit established stricter standards of analysis for settlements in which antitrust liability may be scrutinized, although these circuits framed their decisions slightly differently. The Sixth Circuit held in *In re Cardizem Antitrust Litigation* that reverse payment settlements violated antitrust laws per se.¹²³ The Third Circuit, in *In re K-Dur Antitrust Litigation*, rejected the “scope of the patent” test on a set of facts very similar to a case heard in the Eleventh Circuit in 2005 (*Schering-Plough*).¹²⁴ The Third Circuit held that reverse payment settlements were presumptively anticompetitive and that courts should use the quick-look standard of antitrust analysis when determining antitrust liability.¹²⁵ In this analysis, the fact finder must treat reverse payments to a generic company “who agrees to delay entry into the market as *prima facie* evidence of an unreasonable restraint of trade, which could be rebutted by showing that the payment (1) was for a purpose other than delayed entry or (2) offers some pro-competitive benefit.”¹²⁶ The patentee could demonstrate the settlement was permissible under antitrust laws by either showing that the payment was not for delayed entry or that the payment generated competitive benefits not possible without the settlement.¹²⁷ Notably, the Third Circuit’s view on potential antitrust liability showed remarkable consistency with the FTC’s views on settlement antitrust liability.

121. Todaro et al., *supra* note 44. See *Watson Pharms., Inc.*, 677 F.3d at 1308; *In re Ciprofloxacin Hydrochloride Antitrust Litig.*, 544 F.3d at 1332–37; *In re Tamoxifen Citrate Antitrust Litig.*, 466 F.3d at 212–13; *Schering-Plough Corp. v. FTC*, 402 F.3d 1056, 1076 (11th Cir. 2005).

122. *Watson Pharms.*, 677 F.3d at 1312.

123. *In re Cardizem CD Antitrust Litig.*, 332 F.3d 896, 908 (6th Cir. 2003).

124. See *In re K-Dur Antitrust Litig.*, 686 F.3d 197 (3d Cir. 2012); *Schering-Plough Corp.*, 402 F.3d at 1056.

125. *In re K-Dur Antitrust Litig.*, 686 F.3d at 218.

126. *Id.*

127. *Id.*

**Table 1: Reverse Payment Settlement Cases of Significance, 2003–2013,
as of March 9, 2014**

Case	Year	Location	Holding	Most Recent Disposition
FTC v. Actavis, Inc. ¹²⁸	2013	Supreme Court	Rule-of-reason antitrust analysis required	Remanded for further review
FTC v. Watson Pharms. ¹²⁹	2012	Eleventh Cir.	“Scope of the Patent” Test	Remanded from Supreme Court
In re K-Dur ¹³⁰	2012	Third Cir.	RPSs are presumptively anticompetitive, quick-look analysis for antitrust liability	Under consideration for certiorari
In re Cipro ¹³¹	2008	Federal Cir.	“Scope of the Patent” Test	N/A
In re Tamoxifen ¹³²	2006	Second Cir.	“Scope of the Patent” Test	N/A
Schering-Plough Corp. v. FTC ¹³³	2005	Eleventh Cir.	RPSs should not be inherently suspect; “natural by-product” of Hatch-Waxman regime	N/A
In re Cardizem ¹³⁴	2003	Sixth Cir.	RPS violate antitrust laws per se	N/A

II. THE SUPREME COURT’S RULING IN *FTC V. ACTAVIS*: COURTS MUST APPLY THE “MODIFIED RULE-OF-REASON” STANDARD TO ANALYZE REVERSE PAYMENT SETTLEMENTS

In a 5-3 decision,¹³⁵ the Supreme Court in *Actavis* held that the Eleventh Circuit “should have allowed the FTC’s lawsuit to proceed” because reverse payment settlements “can sometimes violate the antitrust laws.”¹³⁶ The Court stated that both patent law policy and “procompetitive antitrust policies” must be considered to determine the “scope of the patent monopoly” and

128. *FTC v. Actavis, Inc.*, 133 S. Ct. 2223 (2013).

129. *FTC v. Watson Pharms.*, 677 F.3d 1298 (11th Cir. 2012).

130. *In re K-Dur Antitrust Litig.*, 686 F.3d 197 (3d Cir. 2012).

131. *In re Ciprofloxacin Hydrochloride Antitrust Litig.*, 544 F.3d 1323 (Fed. Cir. 2008).

132. *In re Tamoxifen Citrate Antitrust Litig.*, 466 F.3d 187 (2d Cir. 2006).

133. *Schering-Plough Corp. v. FTC*, 402 F.3d 1056 (11th Cir. 2005).

134. *In re Cardizem CD Antitrust Litig.*, 332 F.3d 896 (6th Cir. 2003).

135. Justice Alito recused himself from the decision; no explanation was given for his absence. *FTC v. Actavis, Inc.*, 133 S. Ct. 2223, 2223 (2013).

136. *Actavis*, 133 S. Ct. at 2225.

antitrust liability.¹³⁷ As such, the Court mandated the analysis of reverse payment settlements by lower courts using a modified version of the antitrust “rule of reason.”¹³⁸ However, the Court also rejected the FTC’s position that reverse payment settlements are presumptively unlawful.¹³⁹

This Part reviews the rationale of the majority and dissenting opinions, in particular focusing on the guiding principles outlined for the application of the rule of reason in reverse payment settlement cases. The dissenting opinion elected to uphold the “scope of the patent” test, and this discussion outlines the rationale for this position.

A. MAJORITY OPINION: “SCOPE OF THE PATENT” TEST REJECTED;
ANTITRUST RULE-OF-REASON ANALYSIS REQUIRED

Justice Breyer, writing for the majority in *Actavis*, considered five factors in determining that the Federal Trade Commission should have had an opportunity to prove its case.¹⁴⁰ First, the Court argued that patent settlements may have “genuine adverse effects on competition” if the patentee can simply set price levels for a compound for extended periods of time.¹⁴¹ Second, in some cases the consequences of these payments may be anticompetitive and “unjustified,” for example where the payment does not offset the cost of litigation.¹⁴² Third, “where a reverse payment threatens to work unjustified anticompetitive harm, the patentee likely possesses the power to bring that harm about in practice.”¹⁴³ Fourth, the Court held that “it is normally not necessary to litigate patent validity to answer the antitrust question” because “[a]n unexplained large reverse payment itself would normally suggest that the patentee has serious doubts about the patent’s survival.”¹⁴⁴ Therefore, the Court reasoned, it may not be necessary to litigate patent validity to determine antitrust validity, as the payment itself “constitutes the relevant anticompetitive harm.”¹⁴⁵ Finally, recognizing that a settlement may still be the preferred method of dealing with the risk of

137. *Id.* at 2231.

138. *Id.* at 2236.

139. *Id.* at 2237.

140. *Id.* at 2234–38.

141. *Id.* at 2234.

142. *Id.* at 2235–36; *see also* Steven Shavell, *The Social Versus the Private Incentive to Bring Suit in a Costly Legal System*, 11 J. LEGAL STUD. 333, 333–339 (1982) (arguing that litigation is socially desirable only when deterrence benefits from litigation exceed the cost of litigation).

143. *Actavis*, 133 S. Ct. at 2236.

144. *Id.*

145. *Id.*

competition, the majority opinion stated that parties in litigation can still settle without employing a reverse payment settlement.¹⁴⁶

Although the Court laid out the rationale for considering antitrust liability extensively, it simply ordered lower courts to use the antitrust rule of reason to analyze antitrust liability without providing a complete framework for evaluating these settlements.¹⁴⁷ In so doing, the plaintiff in a case must demonstrate that a settlement's anticompetitive effects outweigh the procompetitive effects. This analysis will require a case-by-case look at the circumstances and terms of each settlement. The Court provided some guidance towards an analysis using traditional antitrust factors, but it highlighted that "large" payment sums should be analyzed more carefully, as a large payment may "provide a workable surrogate for a patent's weakness."¹⁴⁸ In addition, the Court explained that if the scale of the settlement is too large compared to the cost of potential future litigation, or if other reasonable justification is not available, a court may determine that a reverse payment settlement is anticompetitive.¹⁴⁹

B. DISSENT: "SCOPE OF THE PATENT" TEST SHOULD BE THE STANDARD

The dissent, authored by Chief Justice Roberts, argued that the Solvay settlement did not violate antitrust laws because the "conduct . . . did not exceed the scope of its patent."¹⁵⁰ Closely following the logic put forward in the Second, Eleventh, and Federal Circuits, the dissent stated that since there had not been allegations of fraud or sham litigation,¹⁵¹ Solvay's payments to generic companies did not violate antitrust law because the payments were made to force the other companies to respect Solvay's patent.¹⁵²

The dissent additionally focused on the majority's assumption that a payment by the brand-name manufacturer demonstrated that the patent holder doubted the validity of the patent.¹⁵³ The dissent offered other potential rationales, including that the patent holder may simply be risk-

146. *Id.* at 2237.

147. *Id.* at 2237–38.

148. *Id.* at 2236–37.

149. *Id.* at 2237–38.

150. *Id.* at 2238 (Roberts, C.J., dissenting).

151. In the antitrust context, the Supreme Court has provided guidance as to the test for "sham litigation." Sham suits must be "objectively baseless in the sense that no reasonable litigant could realistically expect success on the merits." *Prof'l Real Estate Investors, Inc. v. Columbia Pictures Indus.*, 508 U.S. 49, 60 (1993).

152. *Actavis*, 133 S. Ct. at 2239 (Roberts, C.J., dissenting).

153. *Id.* at 2244–45.

averse or unwilling to engage in litigation on the issue.¹⁵⁴ It concluded that the true motivation of parties involved in the reverse payment settlement could be hard to determine.¹⁵⁵

Finally, the dissent argued that under the majority's rationale, *all* patent settlements, not just those in the pharmaceutical industry subject to the Hatch-Waxman Act, would be subject to the rule of reason.¹⁵⁶ Additionally, it argued, the majority rationale would discourage settlements in patent litigation, thereby decreasing judicial efficiency and increasing litigation costs and burdens to the court system in general.¹⁵⁷

III. THE LEGAL LANDSCAPE AFTER *ACTAVIS*

Although the Supreme Court did not establish a standard of presumptive illegality in *Actavis*, it did establish that the legality of reverse payment settlements is definitely in question. However, considering the Court's decision left the actual application of the rule-of-reason antitrust standard to lower courts, it seems possible that circuits may split on application of the standard similarly to how they split on what level of antitrust scrutiny to apply. Section III.A explores the legal outcomes possible under the rule-of-reason rationale under *Actavis*, while also considering that one major effect of this ruling may be that patent litigation in these cases will continue, without settlements, regardless of cost or efficiency.

Additionally, several questions have been left open following the ruling in this case. First, both the majority and the dissent seem to agree that "reasonable" settlements are permissible, yet neither opinion specifies what a "reasonable" settlement would be.¹⁵⁸ It is likely that litigants will seek to push the boundaries of this doctrine, if only to see what the limits are. Second, the ruling does not specify how to approach cases in which monetary compensation is not the consideration offered in a settlement. Section III.B explores this concept more thoroughly, in the context of pending decisions on previously executed reverse payment settlements.

154. *Id.* at 2243–45.

155. *Id.*

156. *Id.* at 2245.

157. *Id.* at 2243.

158. *FTC v. Actavis, Inc.*, 133 S. Ct. 2223 (2013).

A. POTENTIAL OUTCOMES IN ANTITRUST LIABILITY CASES AFTER
ACTAVIS

The *Actavis* decision outlined situations in which settlements are definitely permissible and at risk. For example, parties may negotiate a date for the generic compound to enter the market prior to a patent's expiration.¹⁵⁹ In addition, brand-name companies may compensate generic companies in cash in certain limited situations like litigation costs.¹⁶⁰ However, "unexplained large reverse payment[s]" raise doubts as to the legality of the settlement, as such payments suggest that the patent holder must have doubts about the validity of the patent to have settled.¹⁶¹

One way of considering the potential effects of a settlement is to analyze what happens in situations where parties have settled. For example, if parties settle a litigation action over a valid patent that the generic company has actually infringed, the generic company gets an undeserved win, but the consumer may also win if the date of entry is set before patent expiration. Conversely, if the parties settle litigation when the patent is invalid and thus the generic is not infringing, the brand-name manufacturer received unfair exclusivity for a longer period of time.

Understandably, generic companies need to be able to bring patent challenges to reach the market, and the Hatch-Waxman regime facilitates these challenges. It may be logical to argue that the right to bring challenges inherently should include a right to settle in an effort to bring drugs to the market sooner. In a litigation scenario, if the patent challenger loses, entry is delayed until the patent expires, which may be bad for overall consumer welfare, but it is good for the patentee, since he will continue to enjoy profits presumably at the same level until the patent expires. If the patent challenger wins, the company may enter the market, benefitting the company and consumers (following the 180-day exclusivity period).¹⁶²

In both scenarios, a settlement may reflect the expectations of the parties. Another way of framing this idea is that the patent holder is accepting lower damages overall in a settlement from the generic company. If the patent challenger and the patentee settle, in many cases generic entry could occur before the end of the patent period. Thus, if it becomes more difficult to settle under the *Actavis* rule, generic companies will have no "easier" way out of litigation while still obtaining some potential benefits and will be

159. *Id.* at 2237.

160. *Id.* at 2235.

161. *Id.* at 2236.

162. *See supra* note 45.

incentivized to continue to pay litigation costs or to not pursue litigation in the first place. Generic companies will face greater risks in pursuing potentially costly settlements, particularly given their relatively finite resources. This change may limit the effectiveness of the Hatch-Waxman regime in removing deadweight patents.

Actavis also relies heavily on the logic from *California Dental Association v. FTC*, in which the Supreme Court held that the quick-look antitrust analysis was inappropriate where a professional association imposed restrictions on the types and qualities of permissible advertising for dentists.¹⁶³ In *California Dental* the Court reasoned that, as it held in *Actavis*, the likelihood of noncompetitive effects of the discount and advertising restrictions imposed in the case were not obvious and indeed could have been procompetitive.¹⁶⁴ This approach requires future courts considering similar situations to identify the basis of anticompetitive effects, even if theoretically, and then determine whether these effects actually were anticompetitive.¹⁶⁵ The rule-of-reason analysis proposed in *Actavis* echoes the cautious approach displayed in *California Dental*, and courts will likely look to the language and reasoning in *California Dental Association* when analyzing reverse payment settlements in the future.

B. PENDING CASES WITH *ACTAVIS* IMPLICATIONS¹⁶⁶

Given the number of reverse payment settlement deals executed since 2005, it is no surprise that litigation is pending in a number of these cases. In fact, particularly after *Actavis*, it is likely that even more lawsuits will be filed to stop reverse payment settlements under the rule-of-reason analysis. This Part analyzes these cases, their relevant issues, and likely outcomes under the *Actavis* doctrine. Table 2 provides an overview of pending litigation, both brought by the FTC and by private parties. The table reviews the parties involved in the litigation, the location of the suit, and the type of suit (whether instigated by the FTC or between private parties). In addition, the table provides information about the date of the settlement and the date of initial suit in the case, the volume of sales before a generic came onto the market, and the size of the settlement executed between the private parties at issue. Finally, the grounds for antitrust challenge are provided, as is the current state of the litigation.

163. *Cal. Dental Assn. v. FTC*, 526 U.S. 756, 756 (1999).

164. *Id.* at 771–72.

165. *Id.* at 774–76.

166. Thanks to Seth Silber for helpful discussions regarding this Section (and the Note in general).

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Much as before the *Actavis* decision, it seems likely that plaintiffs and defendants will elect to forum shop based on the expertise of the jurisdiction in question and the likelihood of receiving the desired verdict. Thus far, most cases have been brought in trial courts in the Third Circuit,¹⁶⁷ where, as before, many plaintiffs brought reverse payment settlement cases due to the favorable case law on the books.¹⁶⁸ Conversely, defendants will likely still focus their efforts on having their cases heard in the Second, Eleventh, and Federal Circuits because of the makeup of the panels and prior case law regarding RPSs.¹⁶⁹

167. *See infra* Table 2.

168. *See supra* Section I.D.2; *see also* Peter Levitas, *Post-Actavis, The Pay-For-Delay Debate Is Far From Over*, LAW360 (Dec. 18, 2013, 10:38 PM), <http://www.law360.com/articles/495157/post-actavis-pay-for-delay-debate-is-far-from-over>.

169. *Id.*

Table 2: Major Currently Pending and Recently Resolved RPS Cases, as of March 9, 2014

Case	Drug (Function)	Location	Parties	FTC/ Private Suit?	Settlement Date; Suit Date	Sales Before Generic	Settlement Size	Grounds for Antitrust Challenge	Current State of Litigation
<i>In re</i> Cephalon ¹⁷⁰	Provigil (sleep disorder)	E.D. Pa.	FTC, Cephalon, Teva	FTC/ Private	2005 ¹⁷¹ ; 2008 ¹⁷²	\$1.1 billion/ year ¹⁷³	> \$200 million ¹⁷⁴	FTC suit - anticompetitive ¹⁷⁵	Disgorgement under examination ¹⁷⁶
<i>In re</i> Androgel (<i>Actavis</i>) ¹⁷⁷	Androgel (testosterone replacement)	Eleventh Circuit	FTC, Par, AbbVie (Solvay), Actavis, Paddock	FTC/ Private	2006 ¹⁷⁸ ; 2009 ¹⁷⁹	\$1.3 billion/year ¹⁸⁰	≈ \$100 million ¹⁸¹	FTC suit - anticompetitive ¹⁸²	Supreme Court remanded to 11th Cir. ¹⁸³

170. See generally *In re* Cephalon Antitrust Litig., No. 2:08-cv-2141 (E.D. Pa. 2008). The Federal Trade Commission is attempting to add Teva to the suit. See Alex Lawson, *Teva Says FTC Can't Draw It Into Pay-For-Delay Case*, LAW360 (Jan. 8, 2014, 7:16 PM), <http://www.law360.com/articles/499717/teva-says-ftc-can-t-draw-it-into-pay-for-delay-case>.

171. Complaint at 2, *FTC v. Cephalon, Inc.*, 551 F. Supp. 2d 21 (D.D.C. 2008) (No. 08-0244).

172. See generally *id.*

173. *U.S. Pharmaceutical Sales – 2011*, DRUGS.COM (Nov. 2013), <http://www.drugs.com/stats/top100/2011/sales> (last visited Jan. 16, 2014).

174. Carrier, *supra* note 1, at 444.

175. *In re* Cephalon Antitrust Litig., No. 2:08-cv-2141 (E.D. Pa. 2008).

176. Jonathan L. Lewis, *Give it Back! Disgorgement – Another FTC Arrow Against Reverse-Payment Settlements that Delay Generic Entry*, ANTITRUST ADVOCATE (Dec. 3, 2013), <http://www.antitrustadvocate.com/2013/12/03/give-it-back-disgorgement-another-ftc-arrow-against-reverse-payment-settlements-that-delay-generic-entry/>.

177. See generally *In re* Androgel Antitrust Litig. (No. II), No. 1:09-md-02084 (N.D. Ga. 2013).

178. *In re* Androgel Antitrust Litig. (No. II), 687 F. Supp. 2d 1371, 1375 (N.D. Ga. 2010).

179. *Id.* at 1375–76.

Case	Drug (Function)	Location	Parties	FTC/ Private Suit?	Settlement Date; Suit Date	Sales Before Generic	Settlement Size	Grounds for Antitrust Challenge	Current State of Litigation
<i>In re</i> Lipitor ¹⁸⁴	Lipitor (cholesterol reduction)	D.N.J.	End-payors (class action), Ranbaxy, Pfizer	Private	2008 ¹⁸⁵ ; 2011 ¹⁸⁶	\$7.4 billion/year ¹⁸⁷	Side deal; see below ¹⁸⁸	Side-deal ¹⁸⁹	Discovery ¹⁹⁰
<i>In re</i> Effexor ¹⁹¹	Effexor (depression)	D.N.J.	Wyeth/Pfizer	Private	2005 ¹⁹² ; 2011 ¹⁹³	\$2.4 billion/year ¹⁹⁴	No-AG agreement ¹⁹⁵	No-AG ¹⁹⁶	Stayed pending <i>K-Dur</i> cert ¹⁹⁷

180. U.S. Pharmaceutical Sales – 2012, DRUGS.COM (Nov. 2013), <http://www.drugs.com/stats/top100/2012/sales> (last visited Jan. 16, 2014).

181. *FTC v. Actavis, Inc.*, 133 S. Ct. 2223, 2229 (2013).

182. *In re* Androgel Antitrust Litig. (No. II), No. 1:09-md-02084 (N.D. Ga. 2013).

183. *Actavis*, 133 S. Ct. at 2238. The case is currently being litigated in the Northern District of Georgia.

184. *In re* Lipitor Antitrust Litig., No. 3:12-cv-2389 (PGS), 2013 WL 4780496 (D.N.J. Sept. 5, 2013).

185. *Id.* at *19.

186. *Id.* at *42.

187. U.S. PIRG & COMMUNITY CATALYST, *supra* note 11.

188. Pfizer forgave Ranbaxy debt and a marketing agreement for generic Lipitor. *In re Lipitor*, 2013 WL 4780496, at *20.

189. *Id.*

190. *See generally id.*

191. *See generally In re* Effexor Antitrust Litig., No. 11-cv-5479 (D.N.J. 2011). Effexor may also be used for treatment of anxiety and panic disorder. *Id.*

192. *Id.*

193. *Id.*

194. U.S. PIRG & COMMUNITY CATALYST, *supra* note 11.

195. *In re Effexor*, No. 11-cv-5479 (D.N.J. 2011).

196. *Id.*

197. *Id.*

Case	Drug (Function)	Location	Parties	FTC/ Private Suit?	Settlement Date; Suit Date	Sales Before Generic	Settlement Size	Grounds for Antitrust Challenge	Current State of Litigation
<i>In re Lamictal</i> ¹⁹⁸	Lamictal (epilepsy)	D.N.J.	GlaxoSmithKline, Teva	Private	2005 ¹⁹⁹ ; 2012 ²⁰⁰	\$1.5 billion/year ²⁰¹	No-AG agreement ²⁰²	No-AG ²⁰³	Case dismissed ²⁰⁴
<i>In re Nexium</i> ²⁰⁵	Nexium (heartburn)	D. Mass.	AstraZeneca, Ranbaxy	Private	2008 ²⁰⁶ ; 2013 ²⁰⁷	\$5.6 billion/year ²⁰⁸	1) Nexium supply; 2) Generics of Plendil, Prilosec ²⁰⁹	No-AG ²¹⁰	Discovery ²¹¹

198. *In re Lamictal Direct Purchaser Antitrust Litig.*, No. 12-995(WHW), 2014 WL 282755 (D.N.J. Jan. 24, 2014). The Third Circuit remanded *In re Lamictal* to D.N.J. for reexamination in light of *Actavis*. *Id.* at *3.

199. *Id.* at *1.

200. *Id.* at *2.

201. U.S. PIRG & COMMUNITY CATALYST, *supra* note 11.

202. *In re Lamictal*, 2014 WL 282755, at *1–2.

203. *Id.*

204. *Id.* at *1.

205. *In re Nexium (Esomeprazole) Antitrust Litig.*, No. 12-md-02409-WGY, 2013 WL 4832176 (D. Mass. Sept. 11, 2013).

206. *Id.* at *6.

207. *Id.* at *2.

208. U.S. PIRG & COMMUNITY CATALYST, *supra* note 11.

209. *In re Nexium*, 2013 WL 4832176.

210. *Id.* at *6–9.

211. *See generally id.*

Case	Drug (Function)	Location	Parties	FTC/ Private Suit?	Settlement Date; Suit Date	Sales Before Generic	Settlement Size	Grounds for Antitrust Challenge	Current State of Litigation
Loestrin 24 ²¹²	Loestrin (oral contraceptive)	E.D. Pa.	Class actions; Warner Chilcott PLC, Actavis, Lupin Pharms.	Private	2010 ²¹³ ; 2013 ²¹⁴	\$633 million ²¹⁵	License, side deal ²¹⁶	Side deal ²¹⁷	Centralized six class actions ²¹⁸
Niaspan ²¹⁹	Niaspan (niacin)	D.R.I. ²²⁰ ; E.D. Pa. ²²¹	City of Providence, Painters Dist. Council, AbbVie, Teva	Private	2005 ²²² ; 2013 ²²³	\$889 million ²²⁴	Supply and promotion ²²⁵	Restrictions on trade ²²⁶	Respond to complaint ²²⁷

212. United Food and Commercial Workers Local 1776 & Participating Emp'rs Health and Welfare Fund v. Warner Chilcott Pub. Ltd. Co., No. 2:13-cv-01807, 2013 WL 2256456 (E.D. Pa. May 23, 2013).

213. *Warner Chilcott*, 2013 WL 2256456, ¶95 (E.D. Pa. May 23, 2013).

214. *Id.*

215. *Estimated Dates of Possible First-Time Generics/Rx-to-OTC Market Entry*, MEDCO, <http://www.krtv.com/files/genericdates.pdf> (last visited May 19, 2014).

216. *Warner Chilcott*, 2013 WL 2256456, ¶97-98 (E.D. Pa. May 23, 2013).

217. *Id.*

218. Gavin Broady, *JPML Ships Loestrin Pay-For-Delay Suits to Rhode Island*, LAW360 (Oct. 3, 2013, 7:10 PM), <http://www.law360.com/articles/478010/jpml-ships-loestrin-pay-for-delay-suits-to-rhode-island>.

219. City of Providence v. AbbVie Inc. et al, No. 1:13-cv-00292 (D.R.I. Apr. 30, 2013); *see also* Elizabeth T. Brown, *Crop of Pay-For-Delay Suits Centered on Extended-Release Niacin Filed*, WESTLAW INTELL. PROP. DAILY BRIEFING, 2013 WL 71844265 (May 3, 2013). Niaspan uses the vitamin niacin to reduce cholesterol. *Id.*

220. *Id.*

221. Painters Dist. Council No. 30 Health & Welfare Fund v. AbbVie Inc. et al., No. 2:13-cv-02343 (E.D. Pa. Apr. 30, 2013).

222. *Id.*

223. *Id.*

Case	Drug (Function)	Location	Parties	FTC/ Private Suit?	Settlement Date; Suit Date	Sales Before Generic	Settlement Size	Grounds for Antitrust Challenge	Current State of Litigation
United Food & Commercial Workers Local 1776 v. Medicis Pharm. Corp. ²²⁸	Solodyn (acne drug)	E.D. Pa.	United Food & Commercial Workers, Medicis, Teva, Mylan, Sandoz	Private	2008 ²²⁹ ; 2013 ²³⁰	\$760 million/year ²³¹	\$55 million ²³²	No-AG, direct payments, product hopping ²³³	Response to complaint ²³⁴
Miami-Luken, Inc. v. Boehringer ²³⁵	Aggrenox (Stroke)	E.D. Pa.	Miami-Luken, Inc.; Boehringer, Barr Pharms.	Private	2008 ²³⁶ ; 2013 ²³⁷	\$366 million ²³⁸	\$120 million; side deal ²³⁹	Payment, side deal ²⁴⁰	Filed suit ²⁴¹

224. *Estimated Dates of Possible First-Time Generics/Rx-to-OTC Market Entry*, MEDCO, <http://www.krtv.com/files/genericdates.pdf> (last visited May 19, 2014).

225. *City of Providence v. AbbVie Inc. et al*, No. 1:13-cv-00292 (D.R.I. Apr. 30, 2013).

226. *Id.*

227. *Id.*

228. *United Food and Commercial Workers Local 1776 & Participating Emp'rs Health and Welfare Fund v. Medicis Pharm. Corp. et al.*, No. 2:13-cv-04235 (E.D. Pa. Jul. 23, 2013).

229. *Id.*

230. *Id.*

231. *2011 U.S. Sales* (Nov. 2013), DRUGS.COM, <http://www.drugs.com/stats/top100/2011/sales> (last accessed Dec. 21, 2013).

232. *Medicis Pharm. Corp.*, No. 2:13-cv-04235 (E.D. Pa. Jul. 23, 2013).

233. *Id.*

234. *Id.*

235. *Miami-Luken, Inc. v. Boehringer Ingelheim Pharma GMBH & Co. KG et al.*, No. 2:13-cv-06543 (E.D. Pa. Nov. 8, 2013).

236. Michael Lipkin, *Boehringer Sued Over \$120M Pay-For-Delay On Stroke Drug*, LAW360 (Nov. 12, 2013, 8:27 PM), <http://www.law360.com/articles/488020/boehringer-sued-over-120m-pay-for-delay-on-stroke-drug>.

237. *Id.*

Case	Drug (Function)	Location	Parties	FTC/ Private Suit?	Settlement Date; Suit Date	Sales Before Generic	Settlement Size	Grounds for Antitrust Challenge	Current State of Litigation
Int'l Union of Painters & Allied Trades v. Teva ²⁴²	Aggrenox (Stroke)	D. Minn.	Int'l Union of Painters & Allied Trades; Boehringer, Barr Pharms.	Private	2008 ²⁴³ ; 2014 ²⁴⁴	\$366 million ²⁴⁵	\$120 million; side deal ²⁴⁶	Payment, side deal ²⁴⁷	Filed suit ²⁴⁸
Am. Sales Co., LLC v. Boehringer ²⁴⁹	Aggrenox (Stroke)	D. Conn.	Am. Sales Co., LLC; Boehringer, Barr Pharms.	Private	2008 ²⁵⁰ ; 2014 ²⁵¹	\$366 million ²⁵²	\$120 million; side deal ²⁵³	Payment, side deal ²⁵⁴	Filed suit ²⁵⁵

238. *Id.*

239. *Id.*

240. *Id.*

241. *Id.*

242. Int'l Union of Painters and Allied Trades, Dist. Council 21 v. Teva Pharms. USA Inc. et al., No. 0:14-cv-00050 (D. Minn. Jan. 6, 2014).

243. Dan Prochilo, *Boehringer, Teva Sued Again Over Deal to Delay Generic*, LAW360 (Jan. 6, 2014, 4:12 PM), http://www.law360.com/lifesciences/articles/498915?nl_pk=127accd7-c358-49d8-9691-276f2bf3ab31&utm_source=newsletter&utm_medium=email&utm_campaign=lifesciences.

244. *Id.*

245. *Id.*

246. *Id.*

247. *Id.*

248. *Id.*

249. Am. Sales Co., LLC v. Boehringer Ingelheim Pharma GMBH & Co. KG et al., No. 3:14-cv-00003 (D. Conn. Jan. 2, 2014).

250. Jeff Overley, *Boehringer, Teva Sued Over \$120M Pay-For-Delay Deal*, LAW360 (Jan. 3, 2014, 7:10 PM), <http://www.law360.com/articles/498398/boehringer-teva-sued-over-120m-pay-for-delay-deal>.

251. *Id.*

252. *Id.*

253. *Id.*

254. *Id.*

1. *Pending FTC Litigation Against Reverse Payment Settlements*

As explained in Section I.C, *supra*, both the FTC and private plaintiffs may bring suits against parties to reverse payment settlements. For cases involving the FTC as enforcer, one must consider the FTC's agenda after winning the case—what result does the FTC want? In addition, the available resources of the FTC to implement any desired actions must be analyzed as well. Since the FTC's resources are limited, the FTC will only bring suits against potential violators in certain cases. Currently, the FTC has brought suit in two reverse payment settlement cases: *In re Androgel Antitrust Litigation*²⁵⁶ (the remand of the *FTC v. Actavis* Supreme Court case) and *In re Cephalon Antitrust Litigation*²⁵⁷ (the case described in the introduction of this Note).

a) *In re Androgel Antitrust Litigation (No. II)*

The Eleventh Circuit is currently reviewing the merits of the remanded *FTC v. Actavis* case in light of the *Actavis* decision. However, a Georgia federal judge has indicated that he would reverse his decision in the original case, thereby overturning his dismissal of the reverse payment settlement claims if the Eleventh Circuit decides to remand the case.²⁵⁸

b) *In re Cephalon Antitrust Litigation*

The FTC is also pursuing action in *In re Cephalon Antitrust Litigation*, a case centered on a reverse payment settlement for the sleep-disorder medication Provigil.²⁵⁹ The FTC has prioritized litigation based on the over \$200 million settlement between Cephalon and generic companies Teva, Ranbaxy, Mylan, and Barr.²⁶⁰

There, Cephalon had obtained patent protection on the active compound in its drug Provigil until 2001 and had obtained a secondary formulation

256. *In re Androgel Antitrust Litig. (No. II)*, No. 1:09-md-02084 (N.D. Ga. 2013).

257. *FTC v. Cephalon, Inc.*, No. 2:08-cv-02141 (E.D. Pa. 2013).

258. Melissa Lipman, *AndroGel Judge Says It's Time to Revive Class Fight*, LAW360 (Oct. 24, 2013, 6:34 PM), http://www.law360.com/ip/articles/483004?nl_pk=25ea4785-aa48-4f5f-969c-81f045fa96b8&utm_source=newsletter&utm_medium=email&utm_campaign=ip.

259. For a description of the facts of the case, see the introductory comments to this Note.

260. Carrier, *supra* note 1, at 444. *In re Cephalon Antitrust Litigation* also raises the additional potentially anticompetitive action of “product hopping,” the consideration of which falls outside the scope of this Note. See *In re Cephalon Antitrust Litig.*, No. 2:08-cv-2141 (E.D. Pa. 2008).

patent lasting until October 2014.²⁶¹ Generic companies could not avoid the active ingredient patent, but they could devise formulations that would not infringe the secondary patent.²⁶² As such, the four generic companies listed above submitted ANDAs in December 2002.²⁶³

Cephalon and the generic companies alike had anticipated significantly decreased revenue for Cephalon following generic entry in the Provigil market. One Cephalon vice president estimated that prices would decrease seventy-five to ninety percent within one year, lowering the overall revenues for the product by \$400 million that year alone.²⁶⁴ Although Cephalon sought to extend its market share by creating a successor product called Nuvigil, which provided longer drug effects but had a similar composition to that of Provigil, the FDA did not approve the new compound in time to successfully block anticipated generic entry to the market in early 2006.²⁶⁵ Cephalon thus settled with the generic companies to prevent generic market entry until April 2012.²⁶⁶

In 2012, the FTC sued all parties involved in the settlement, alleging antitrust violations under Section 5(a) of the Federal Trade Commission Act; litigation in this proceeding is currently ongoing, despite the fact that generic versions of Provigil have been launched.²⁶⁷ Cephalon argued that the case should be dismissed in September 2013 pleadings, citing the current presence of generic versions on market as a primary reason for dismissal.²⁶⁸ But the FTC subsequently argued that there still existed appropriate remedies, especially considering that Cephalon received the benefit of the extra six years of generic market entry protection; “monetary equitable relief is particularly important to deny a proven violator its ill-gotten gains and to deter future violations.”²⁶⁹

261. Complaint ¶¶ 32–34, *FTC v. Cephalon, Inc.*, 551 F. Supp. 2d 21 (D.D.C. 2008) (No. 08-0244).

262. *Id.* at ¶¶ 41–45.

263. *Id.* at ¶ 38.

264. Note that Teva made similar estimates that generic versions would obtain ninety percent of all prescriptions within a month of market entry, dropping prices to ten percent of the brand-name price within one year. *Id.* at ¶ 26.

265. *Id.* ¶ 3.

266. *Id.*

267. Melissa Lipman, *FTC Eyes Disgorgement in Cephalon Pay-For-Delay Fight*, LAW360 (Nov. 19, 2013, 5:11 PM), <http://www.law360.com/articles/489918/ftc-eyes-disgorgement-in-cephalon-pay-for-delay-fight>.

268. *Id.*

269. *Id.*

2. *Private Plaintiff Lawsuits*

In lawsuits with private plaintiffs, oftentimes the litigation targets will be determined by the cases private plaintiffs find potentially lucrative. A number of factors may play into whether a party chooses to raise a suit under the new *Actavis* regime. First, the relevance of the patent merits and the extent to which the brand-name party has paid the generic company to delay entry into the market will be assessed; of particular interest is the size of the payment. In addition, courts must consider the difference between the entry date and the date of patent expiration, as well as the overall size of the market for the drug in question. Private plaintiffs thus will be more likely to sue, particularly if the market for the patented compound is large.

Going forward, district courts will need to assess specific issues regarding the type of payment used in settlements. Three main issues have been raised in the pending cases, including no-authorized-generic (“No-AG”) deals, forgiveness on liability from unrelated litigation, and side deals. No-AG deals have been very common in recent settlements.²⁷⁰ The problem, in the context of *Actavis*, is that a non-compete agreement can be viewed as a significant payment to the generic company. Because *Actavis* did not specifically address this particular type of deal, the lower courts will have to analyze deals on a case-by-case basis, paying careful attention to the facts and deals in each case. In addition, some cases might involve part of the consideration coming in the form of forgiveness for liability from unrelated litigation.²⁷¹ *Actavis* did not clearly proscribe this action as a payment (or payments of any form, in fact), although it seems likely that future courts will view unrelated litigation cost forgiveness skeptically under the rule-of-reason standard. Finally, side deals have made an appearance in a number of settlements, including the deal at issue in *Actavis* (although the Court did not address this portion of the deal in the opinion). In *Actavis*, Solvay agreed to co-promote a compound with its generic competitors.²⁷² Whether this agreement constitutes a “payment” is not settled in case law, as few examples have arisen since the *Actavis* decision in June 2013.

a) No-Authorized-Generic Deals (No-AG)

One particular settlement term under current investigation in several pending actions is the No-AG agreement, in which the brand-name company

270. See *supra* Table 2.

271. *In re Effexor Antitrust Litig.*, No. 11-cv-5479 (D.N.J. 2011).

272. *FTC v. Actavis*, 133 S. Ct. 2223, 2229 (2013).

agrees to not market its own generic brand against a generic manufacturer's product. This settlement provision became common following the FTC's renewed focus on reverse payment settlements around 2006.²⁷³ However, *Actavis* did not speak specifically to the permissibility of this settlement term, and litigating parties have subsequently petitioned the courts to determine their legality.²⁷⁴

A number of pending cases address this settlement provision, with wide-ranging results. The District of Massachusetts has ruled that No-AG agreements are implicated under *Actavis*, while the District of New Jersey recently dismissed a complaint in a No-AG case under *Actavis*. A third case, *In re Effexor*, will be a case to watch on this controversial issue.

i) *In re Nexium (Esomeprazole) Antitrust Litigation*

In the District of Massachusetts, *In re Nexium (Esomeprazole) Antitrust Litigation* has provided a first interpretation of *Actavis*'s ruling at the district court level.²⁷⁵ Here, the district court allowed the reverse payment settlement suit to proceed forward under *Actavis*'s modified rule-of-reason standard, indicating that settlements without monetary compensation are still implicated under *Actavis*.²⁷⁶

Brand-name pharmaceutical company AstraZeneca manufactures Nexium, a compound designed to treat acid reflux.²⁷⁷ AstraZeneca and generic company Ranbaxy (along with other generic manufacturers) had settled a patent litigation suit with an RPS in 2008.²⁷⁸ Ranbaxy agreed to delay the launch of its generic version of Nexium, and AstraZeneca granted Ranbaxy an exclusive license to supply AstraZeneca with Nexium.²⁷⁹ In addition, AstraZeneca gave Ranbaxy the right to serve as an authorized generic distributor for two other pharmaceutical compounds.²⁸⁰ Finally, under the settlement AstraZeneca was not permitted to market its own

273. Hemphill, *Drug Patent Settlements Between Rivals*, *supra* note 19, at 17.

274. See *In re Lamictal Direct Purchaser Antitrust Litig.*, No. 12-cv-995 (WHW), 2014 WL 282755 (D.N.J. Jan. 24, 2014); *In re Nexium (Esomeprazole) Antitrust Litig.*, No. 12-md-02409-WGY, 2013 WL 4832176 (D. Mass. Sept. 11, 2013); *In re Effexor Antitrust Litig.*, No. 11-cv-5479 (D.N.J. 2011).

275. *In re Nexium*, 2013 WL 4832176.

276. See *id.* at *86–88.

277. *Id.* at *2.

278. *Id.* at *16.

279. *Id.* at *18.

280. *Id.*

authorized generic (AG) version of Nexium during a 180-day exclusivity period.²⁸¹

A class action suit was brought against the parties in 2012 in the District of Massachusetts.²⁸² The major issue in this pending case is whether No-AG agreements are a form of compensation implicated under the ruling in *Actavis*. In September 2013, the presiding judge ruled that the case could proceed, holding that “the Direct Purchasers have pled facts sufficient at the motion-to-dismiss stage to establish violations of sections 1 and 2 of the Sherman Act under the rule of reason.”²⁸³ The court determined that the settlement was sufficiently great in value and sufficiently unrelated to settlement of the particular patent in question to trigger antitrust liability, finding that AstraZeneca agreed to pay Ranbaxy consideration valued at over \$1 billion through the provisions in the agreement.²⁸⁴ Also, the settlement with Ranbaxy in particular would have prevented generic entry, even though Ranbaxy was not marketing its generic product until 2014.²⁸⁵ Ranbaxy and the other generic firms also likely would have chosen to enter the market “at risk” based on their past behavior, and finally, no evidence was presented showing procompetitive benefits from the settlement.²⁸⁶ Under the logic in *In re Nexium Antitrust Litigation*, No-AG deals appear to be very risky forms of compensation, and pharmaceutical companies considering a reverse payment settlement would be wise to follow this case closely.

ii) *In re Lamictal Direct Purchaser Antitrust Litigation*

On January 24, 2014, the District of New Jersey dismissed the direct purchaser complaint in *In re Lamictal* for failure to state a claim upon which relief could be granted.²⁸⁷ The court based the decision on an assessment that

281. As with *Actavis*, this case involved brand-name interactions with several generic companies. The litigation in this proceeding also addressed Teva and Dr. Reddy’s; however, the interpretation of *Actavis* in this decision focused on the reverse payment settlement between AstraZeneca and Ranbaxy. *Id.* at *18–22.

282. Dan Prochilo, *Dukes Prevents Class Cert. In Nexium MDL, AstraZeneca Says*, LAW360 (Sept. 17, 2013, 2:40 PM), <http://www.law360.com/competition/articles/473186/dukes-prevents-class-cert-in-nexium-mdl-astrazeneca-says>.

283. *In re Nexium*, 2013 WL 4832176, at *46.

284. *Id.* at *17–18. AstraZeneca also forgave contingent liabilities faced by Teva and Dr. Reddy’s in relation to drugs other than those at issue in the patent litigation. *Id.* at *21–22.

285. *Id.* at *17.

286. *Id.*

287. *In re Lamictal Direct Purchaser Antitrust Litig.*, No 12-cv-995 (WHW), 2014 WL 282755, at *1 (D.N.J. Jan. 24, 2014).

Actavis only applies to settlements that “contain an unjustified reserve payment of money.”²⁸⁸

GlaxoSmithKline (“GSK”) produces Lamictal (lamotrigine), a compound used to treat epilepsy and bipolar disorder.²⁸⁹ In 2002, Teva Pharmaceuticals and subsidiaries filed ANDAs with the FDA, and in response GSK sued Teva for patent infringement.²⁹⁰ GSK and Teva settled the suit in 2005, permitting Teva to enter the market by June 1, 2005 on the chewable formulation and later for tablets.²⁹¹ Most important, GSK and Teva agreed on a No-AG agreement in which GSK would not produce its own generic version of Lamictal products during Teva’s exclusivity period.²⁹²

The court found that “*Actavis* scrutiny only applies to patent settlements that contain reverse payments” and further that the only reverse payments implicated under *Actavis* consist solely of cash.²⁹³ The opinion cites *Actavis* itself for this assertion, noting that Justice Breyer discussed monetary amounts at several places within the opinion.²⁹⁴ Judge Walls also cites *Actavis*’s dissent for support of this position, asserting that Chief Justice Roberts assumed RPS referred only to money.²⁹⁵

Finally, the decision distinguishes *In re Lamictal* from the recent cases *In re Lipitor* and *In re Nexium*, where both cases proceeded forward for further examination of potential antitrust liability under *Actavis*.²⁹⁶ In *In re Lipitor*, the District of New Jersey permitted amendments to a complaint because “nothing in *Actavis* strictly requires that the payment be in the form of money.”²⁹⁷ However, the court ruled that Judge Roberts’s dissent did not support the manufacturers’ position, because their request more closely mirrored a “request for further briefing.”²⁹⁸ The court distinguished *In re Nexium* on the basis that the settlement in that action involved a No-AG agreement and a cash payment, as opposed to just a No-AG agreement.²⁹⁹ It

288. *Id.* at *11.

289. *Id.* at *1.

290. *Id.*

291. *Id.*

292. *Id.* at *2.

293. *Id.* at *6–7.

294. *Id.* at *7 (citing *FTC v. Actavis, Inc.*, 133 S. Ct. 2222, 2227, 2233 (2013)).

295. *Id.* at *8.

296. *See In re Nexium (Esomeprazole) Antitrust Litig.*, No. 12-md-02409-WGY, 2013 WL 4832176 (D. Mass. Sept. 11, 2013); *In re Lipitor Antitrust Litig.*, No. 3:12-cv-2389 (PGS), 2013 WL 4780496 (D.N.J. Sept. 5, 2013).

297. *In re Lipitor*, 2013 WL 4780496, at *26.

298. *In re Lamictal*, 2014 WL 282755, at *9.

299. *Id.*

reasoned that the payments in *In re Nexium* were either “outsized” or “entirely disconnected” from the Nexium patent dispute, according to the logic of *Actavis*, whereas in *In re Lamictal*, all of the settlement terms were directly related to the Lamictal patent dispute.³⁰⁰

iii) *In re Effexor Antitrust Litigation*

As in the previously discussed cases, particularly *In re Nexium*, discussed *supra* at Section III.B.2.a.i, the predominant issue in *In re Effexor Antitrust Litigation* is the presence of a No-AG provision as a major part of a reverse payment settlement.³⁰¹ However, unlike in *In re Nexium*, the district court here has not ruled as of March 9, 2014. *In re Effexor* will be an important case to watch and compare to *Nexium* to better assess the potential permutations of the *Actavis* doctrine when looking at similar issues.

b) Side Deals

Side deals, also commonly found in recent pharmaceutical patent settlements, are settlement terms in which a brand-name and a generic company agree to a joint transaction not directly related to the ending of litigation through the settlement. Co-promotion of a compound is a common form for a side deal. In *Actavis*, the co-promotion to urologists settlement term functioned as a side deal.³⁰² *In re Lipitor*³⁰³ and *Loestrin 24*³⁰⁴ are two other district court cases currently examining side deals.

The legality of these deals is unclear as of yet, and settling parties using these provisions should be prepared for litigation. If a side deal is a legitimate transaction occurring at the same time as a settlement, however, it may be permissible under the rule-of-reason standard of *Actavis*.

c) Unrelated Litigation Costs: *In re Effexor Antitrust Litigation*

The holding in *Actavis* did not address unrelated litigation costs; this issue has been raised in the current *In re Effexor Antitrust Litigation* proceedings.³⁰⁵ Although the district court’s position in *In re Effexor* on unrelated litigation

300. *Id.*

301. Complaint ¶¶ 176, 180, 182, *In re Effexor Antitrust Litig.*, No. 11-cv-5479 (D.N.J. 2011).

302. *FTC v. Actavis, Inc.*, 133 S. Ct. at 2229.

303. *In re Lipitor Antitrust Litig.*, No. 3:12-cv-2389 (PGS) (D.N.J. Sept. 5, 2013).

304. Complaint at ¶¶ 5–12, *United Food and Commercial Workers Local 1776 & Participating Employers Health and Welfare Fund v. Warner Chilcott Pub. Ltd. Co.*, 2013 WL 2256456 (E.D. Pa. Apr. 5, 2013) (No. 2:13-cv-01807).

305. *In re Effexor Antitrust Litig.*, No. 11-cv-5479 (D.N.J. 2011).

costs is thus far unclear, it seems likely that in situations where such costs are sufficiently large and thus an indicator of potentially anticompetitive activity, a court will find that litigation costs may be indicative of a reverse payment settlement in violation of antitrust laws. However, the Court indicated in *Actavis* that litigation costs of an appropriate size are not necessarily indicative of an anticompetitive settlement.³⁰⁶

IV. LOOKING FORWARD: ADDRESSING *ACTAVIS* POTENTIAL FUTURE PROBLEMS AND SOLUTIONS

Judging from the number of pending cases and settlements that have been made in the past few years, it seems likely that the rule-of-reason doctrine from *Actavis* with regard to RPS has not yet settled. As such, it is prudent to consider potential options beyond the court system to promote the values espoused in the case. Section IV.A considers possible improvements to the patent examination system itself that may reduce the number of invalid secondary patents that face litigation through the Hatch-Waxman regime. Next, the potential of using the FTC or other third parties to the settlements in the regulatory process is explored in Section IV.B. Section IV.C explores the international ramifications of the *Actavis* decisions and similar provisions in markets where pharmaceutical companies may operate. Two U.S. congressional initiatives currently under consideration are examined in Section IV.D. Finally, Section IV.E evaluates an amendment to the Hatch-Waxman Act designed to potentially mitigate some of the effects of reverse payment settlements, and it proceeds to make general recommendations on the viability of reverse payment settlements going forward.

A. BETTER PROSECUTION OF PATENTS AT THE PTO: ELIMINATE WEAK “SECONDARY” PATENTS

There is significant evidence in the scientific literature that brand-name companies are extending their periods of exclusivity rights on certain compounds using secondary patents, typically by patenting the method of use for a compound or other procedural aspects beyond the active compound itself.³⁰⁷ Typically, these patents are most likely to be challenged

306. *Actavis*, 133 S. Ct. at 2236–37.

307. For discussion on this issue, see, e.g., Hemphill & Sampat, *supra* note 17; Sherry M. Knowles, *Fixing the Legal Framework for Pharmaceutical Research*, 327 SCI. 1083 (2010); Amy Kapczynski et al., *Polymorphs and Prodrugs and Salts (Oh My!): An Empirical Analysis of “Secondary” Pharmaceutical Patents*, 7 PLoS ONE e49470 (2012).

by generic pharmaceutical companies within the framework of the Hatch-Waxman Act.³⁰⁸ As discussed previously, secondary patents are invalidated at a much higher rate than active ingredient patents in Hatch-Waxman litigation.³⁰⁹ These patents are also the most likely to be the patents at issue in RPSs; the vast majority of reverse payment settlements are the result of litigation challenges to secondary patents.³¹⁰ One of the policy goals of the Hatch-Waxman Act is to encourage generic challenges to invalid patents,³¹¹ but litigation is costly and time consuming, and eliminating invalid patents could be done more efficiently at an earlier stage.

Numerous commentators have discussed their belief that the current patent system creates too many “bad” patents.³¹² A reasonable goal to pursue would be to eliminate more of these secondary patents at the prosecution stage, rather than relying on the judicial system as a second quality-control check. One method to achieve this goal would require authorizing more patent agents and reforming the PTO examination system to increase the amount of time spent on examination of each patent, but this may not be the most practical method in the short term, due to available resources and investment from the government.³¹³ Currently, the PTO spends

308. Hemphill & Sampat, *supra* note 17, at 1386.

309. *See generally* Hemphill & Sampat, *supra* note 17.

310. According to this study, eighty-nine percent of reverse payment settlement litigation completed under Hatch-Waxman resulted from secondary patent challenges. *Id.* at 1387.

311. *See* Part I *infra*.

312. *See, e.g.*, Richard A. Posner, *Why There Are Too Many Patents in America*, THE ATLANTIC (July 12, 2012), available at <http://www.theatlantic.com/business/archive/2012/07/why-there-are-too-many-patents-in-america/259725/> (arguing that most industries have applied for and received more patents than necessary); Joshua L. Sohn, *Can't the PTO Get a Little Respect?*, 26 BERKELEY TECH. L.J. 1603, 1630–32 (2011) (exploring criticisms of the PTO's examination process, including the common criticism regarding “insufficiently rigorous” patent examinations, that examiners are insufficiently trained to properly evaluate patents and finally that examiners are incentivized in the current system to grant rather than reject patents); Robert P. Merges, *As Many as Six Impossible Patents Before Breakfast: Property Rights for Business Concepts and Patent System Reform*, 14 BERKELEY TECH. L.J. 577, 589–91 (1999).

313. Mark A. Lemley, *Rational Ignorance at the Patent Office*, 95 NW. U. L. REV. 1495 (2001). However, many scholars have argued that *increasing* the evaluation time of patents will lead to increased backlogs and is thus unfavorable; these scholars make other proposals regarding the feasibility of changing the process at all. *See, e.g.*, Jonathan S. Masur, *Costly Screens and Patent Examination*, 2 J. LEG. ANAL. 687 (arguing that the patent process serves to eliminate “unwanted participants” from the patent process, and removes socially harmful patents from the pool).

approximately eighteen hours evaluating each patent application.³¹⁴ So if improving the stringency of patent examination is not a viable solution, how do you identify “good” secondary patents and eliminate the “bad” ones?

It may be possible to change patent examination practices to enforce higher standards of validity on secondary patents. One strategy to deal with the examination of secondary patents has been approved in India, where Section 3d of the Indian patent regulations specifies that secondary patents are prohibited unless the applicant demonstrates increased “efficacy” of the new compound or formulation.³¹⁵ India’s approach has some conceptual relationship to the Hatch-Waxman approach, where litigation removes patents at the end of patent terms.³¹⁶ The Indian statute defines “efficacy” as related to therapeutic efficacy,³¹⁷ but widening the definition of “efficacy” to encompass other potential legitimate improvements to the drug may allow for patents that actually comprise an improvement to the drug in question, without allowing weak patents to be approved at the PTO.

B. A POTENTIAL REGULATORY ROLE FOR THE FTC OR THIRD PARTIES?

The court system may not be the most appropriate forum for the analysis of reverse payment settlements. As several authors have previously suggested, administrative agencies may have the proper scope, authority, and freedom to analyze settlements, particularly those involving details not available to the public or in the court’s record.³¹⁸ The FTC itself may be particularly well suited to this task, given its mandate, although establishing appropriate regulatory guidelines would be crucial.³¹⁹

The FTC has stated clearly and recently that it intends to continue to examine settlements, both old and new, for potential violations of antitrust

314. Lemley, *supra* note 313, at 1500 (estimating that patent examiners spend approximately eighteen hours reviewing each patent application, throughout the entire process).

315. Dr. Kenneth Shadlen, *Learning from India? A New Approach to Secondary Pharmaceutical Patents*, LONDON SCHOOL OF ECON. BLOGS (May 3, 2013), <http://blogs.lse.ac.uk/indiaatlse/2013/05/03/a-new-approach-to-pharmaceutical-patents/>.

316. *Id.*

317. *Id.*

318. See, e.g., Hemphill, *Paying for Delay*, *supra* note 7; Timothy A. Weil, Note, *Devising a Legislative Solution to the Reverse Payment Dilemma: How Congress Can Balance Competition, Innovation, and the Public Policy Favoring the Settlement of Disputes Without Litigation*, 55 ST. LOUIS U. L.J. 741 (2011); Laba Karki, *Review of FDA Law Related to Pharmaceuticals: The Hatch-Waxman Act, Regulatory Amendments and Implications for Drug Patent Enforcement*, 87 J. PAT. & TRADEMARK OFF. SOC’Y 602 (2005).

319. 15 U.S.C. § 45; see also *supra* note 318.

law under *Actavis*. Chairwoman Ramirez has recently announced that “the Commission will reexamine settlements previously filed with the Commission in light of the *Actavis* decision to determine whether they merit further investigation.”³²⁰ The *Actavis* and *Cephalon* cases are “near the top of the agency’s to-do list,” and “winning those two challenges” is “Mission 1,” according to Bureau of Competition Director Deborah Feinstein.³²¹ Feinstein also anticipates opening new pay-for-delay investigations based on examination of the Medicare Modernization Act filings as they are submitted by settling parties.³²² The FTC “want[s] to help shape the law . . . where [the FTC] think[s] it’s important for the court to basically treat the *Actavis* position a certain way, [the FTC is] going to help try to develop the law,” including in private cases.³²³

One potential concern with giving the FTC more latitude in these actions is that the FTC has indicated its intention to pursue potentially anticompetitive reverse payment settlements very aggressively,³²⁴ perhaps more aggressively than was intended by the Court in *Actavis*. Although Congress could authorize an increased mandate for the FTC in the regulation of settlements, doing so may lead to the elimination of all reverse payment settlements and heightened scrutiny on other types of settlements between brand-name and generic manufacturers.

Potentially, modifications could be made to either the current Medicare Act provision authorizing FTC scrutiny of settlements after their enactment or to allow the FTC to undertake an adjudicative review of settlements themselves. The current Medicare Act provision authorizes review ten days after the settlement has been enacted,³²⁵ but authorizing earlier review may not be an effective solution to the problem. Although an earlier review may give parties considering a settlement a better indication of the FTC’s position on the legality of the settlement, it may also encourage more litigation overall. Parties are incentivized to execute RPSs where possible and would likely take their settlements to district courts for judicial review, given the amount of

320. *Prepared Statement of the Federal Trade Commission on Pay-for-Delay Deals: Limiting Competition and Costing Consumer Before the United States Senate Comm. on the Judiciary, Subcomm. on Antitrust, Comp. Pol’y and Consumer Rights*, 113th Cong. 3 (Jul. 23, 2013).

321. Melissa Lipman, *Pay-For-Delay Remains Top Priority for Ramirez’s FTC*, LAW360 (Nov. 13, 2013, 9:53 PM), <http://www.law360.com/ip/articles/488528>.

322. *Id.*

323. *Id.*

324. *See supra* note 320.

325. Medicare Prescription Drug Improvement and Modernization Act of 2003, Pub. L. No. 108-173, 117 Stat. 2066 (2003).

time and money invested into the settlements. If Congress instead authorized an adjudicative mechanism within the FTC, the FTC would need additional resources to support the numerous administrative law judges and proceedings that these adjudications would require. This proposal seems to be an inefficient use of administrative resources and might encourage the FTC to examine even more of these settlements in more depth than they already do.

Regardless, the use of a third party other than the court system for regulation would enhance efficiency and allow for more timely analysis of settlements. There are some indications that private entities, as indirect end users, may be authorized to file suit against parties involved in pay-for-delay settlements.³²⁶ However, the *Loestrin 24* case highlights efficiency problems with relying on class actions to challenge settlements.³²⁷ Class actions must be certified, and many, including *Loestrin 24*, must be consolidated from multidistrict litigation, taking time and resources.³²⁸ As such, this mechanism seems unlikely to provide consistency or clarity in the settlement process within a reasonable time.

C. IMPORTANCE OF OTHER JURISDICTIONS IN REVERSE PAYMENT SETTLEMENT LITIGATION

Going forward, pharmaceutical companies operating internationally will need to consider not only the *Actavis* ruling, but also rulings in other jurisdictions within which they intend to operate. June 2013 was a busy month for international rulings on reverse payment settlements. Besides the Supreme Court's ruling in *Actavis*, the European Commission ("EC") issued its first ruling in the Lundbeck case, in which it found that Lundbeck and several generic competitors had violated EC rules by executing a reverse payment settlement.³²⁹ The EC requires an analysis "by object," where

326. Aaron Edlin et al., *Activating Actavis*, ANTI-TRUST MAG. 16 (Fall 2013).

327. *United Food and Commercial Workers Local 1776 & Participating Emp'rs Health and Welfare Fund v. Warner Chilcott Pub. Ltd. Co.*, No. 2:13-cv-01807, 2013 WL 2256456 (E.D. Pa. May 23, 2013); see also Gavin Broady, *JPML Ships Loestrin Pay-For-Delay Suits to Rhode Island*, LAW360 (Oct. 3, 2013, 7:10 PM), <http://www.law360.com/articles/478010/jpml-ships-loestrin-pay-for-delay-suits-to-rhode-island>.

328. See *Warner Chilcott*, 2013 WL 2256456.

329. Press Release, European Commission, Antitrust: Commission fines Lundbeck and other pharma companies for delaying market entry of generic medicines (June 19, 2013), available at http://europa.eu/rapid/press-release_IP-13-563_en.htm?locale=en; see also Jeff Sistrunk, *Lundbeck Fights \$125M Pay-For-Delay Fine in EU*, LAW360 (Sept. 3, 2013, 3:41 PM), <http://www.law360.com/ip/articles/469563/lundbeck-fights-125m-pay-for-delay-fine-in-eu>.

violators of Article 101 (the relevant EC anti-competition provision) have enacted an agreement that has “the object or effect of restricting competition in the European Union” and that any procompetitive results from the restriction cannot “outweigh the anticompetitive effects” identified by the examiner.³³⁰ This standard bears a strong resemblance to the per se standard of antitrust liability reviewed in Section I.D, *supra*, and it contrasts with the standard laid out in *Actavis* in that it does not require a careful weighing of factors as required under the rule-of-reason standard.³³¹ Some commentators have advocated dropping the “by object” standard and taking a line that approximates the standard used in *Actavis*, mostly to avoid confusion and lack of legal certainty regarding these arrangements.³³²

Oftentimes, the EC looks to the United States for guidance on competition-related issues in the pharmaceutical sector.³³³ It is thus likely that the full effects of *Actavis* have not been felt in Europe and that this issue will continue to be a major focus of competition law in Europe and other jurisdictions. Multinational companies may face liability in several countries for their potentially anticompetitive behavior.

D. POTENTIAL CONGRESSIONAL ACTION

Throughout the history of reverse payment settlements, numerous proposals have been made before Congress to modify or prohibit the use of these settlements in ending litigation between brand-name and generic manufacturers.³³⁴ Currently, Congress is considering two potential modifications to the current regulatory regime, which gives rise to reverse

330. Marleen Van Kerckhove, *Reverse Payment Settlement Cases: Under the Rule of Reason By Object? A Brief Reflection*, CPI ANTITRUST CHRON., no. 2, Sept. 2013, at 3.

331. *FTC v. Actavis, Inc.*, 133 S. Ct. 2223 (2013); *see also* Press Release, European Commission, Antitrust: Commission fines Lundbeck and other pharma companies for delaying market entry of generic medicines (June 19, 2013), *available at* http://europa.eu/rapid/press-release_IP-13-563_en.htm?locale=en.

332. *Id.*

333. *Id.* For example, in December 2013, the EC fined Johnson & Johnson and Novartis AG \$22.4 million for enacting an anticompetitive agreement to delay the entry of a generic version of Johnson & Johnson’s fentanyl (painkiller) patch in the Netherlands. Stewart Bishop, *J&J, Novartis Fined \$22.4M Over Pay-For-Delay Deal*, LAW360 (Dec. 10, 2013, 1:06 PM), <http://www.law360.com/articles/494572/j-j-novartis-fined-22-4m-over-pay-for-delay-deal>.

334. For a few examples, see Alan Klein, *Patent Settlement Agreements Remain a Focus in the U.S. Congress*, GENERICSWEB (Nov. 2011), http://www.genericsweb.com/index.php?object_id=1031; Jones Day, *Pending U.S. Legislation to Ban “Reverse Payment” Settlements Would Bring Fundamental Change (and Uncertainty) to Drug Patent Litigation* (Sept. 2010), http://www.jonesday.com/pending_us_legislation/.

payment settlements.³³⁵ The provisions of S. 214 would make these settlements presumptively illegal, while S. 504 proposes a modification to the exclusivity provisions of the Hatch-Waxman Act that would disincentivize generic companies from making reverse payment settlements.

1. *S. 214: Preserve Access to Affordable Generics Act*

In March 2013, the Senate began reconsidering legislation originally proposed in 2007: the Preserve Access to Affordable Generics Act (S. 214).³³⁶ The purpose of this legislation is to make pharmaceutical company pay-for-delay settlements presumptively illegal and to establish a framework for challenges to this presumption.³³⁷ The original version of this bill received a 10-8 vote in committee but died on the floor of the Senate during the 112th Congress.³³⁸

This legislation creates a new section of the Federal Trade Commission Act of 1914, 15 U.S.C. § 44 et seq., allowing the FTC to bring lawsuits with a presumption of illegality against parties involved in a reverse payment settlement.³³⁹ However, the current litigation would be applicable to any license involving an ANDA filer, even if the license came from discussions outside of litigation.³⁴⁰ In addition, courts may not use the presumption that absent a successful challenge to the patent, the generic manufacturer's product would not have entered the market until the expiration of the patent or the branded drug's "statutory exclusivity" period from the FDA.³⁴¹ The law would also disallow the presumption that RPSs are procompetitive because they allow generics onto the market prior to the expiration of the brand-name manufacturer's patent(s).³⁴² Under this rationale, simply allowing

335. Preserve Access to Affordable Generics Act, S. 214, 113th Cong. (2013); Fair and Immediate Release of Generic Drugs Act ("FAIR Generics Act"), S. 504, 113th Cong. (2013).

336. Preserve Access to Affordable Generics Act, S. 316, 110th Cong. (2007), repropoed as Preserve Access to Affordable Generics Act, S. 27, 112th Cong. (2011).

337. Preserve Access to Affordable Generics Act, S.214, 113th Cong. (2013).

338. *See supra* note 336. It is unclear why this bill was not enacted during the 112th Congress; some commentators postulated that the bill died as a result of vigorous lobbying by pharmaceutical companies against its enactment.

339. Preserve Access to Affordable Generics Act, S. 214, 113th Cong. (2013).

340. Jones Day, *supra* note 334.

341. Preserve Access to Affordable Generics Act, S. 214, 113th Cong. (2013). Note that parties to the litigation may still prove this presumption affirmatively. *Id.* Also note that with regards to the presumption about the statutory exclusivity period, the FDA is still permitted to approve the generic compound during that time. *Id.*

342. *Id.*

market entry prior to patent expiration is not sufficient to justify use of RPSs that may be anticompetitive in other ways.

The consideration used to facilitate these settlements is a major focus of the proposed legislation. The settlement will not be considered unlawful if the consideration granted from the brand-name company to the generic company only consists of: (1) the right of the generic company to market its product prior to the expiration of any patent or other exclusivity right that would prevent this type of marketing, (2) a payment of “reasonable litigation expenses not to exceed” \$7.5 million, or (3) a “covenant not to sue on any claim that the [generic product] infringes a United States Patent.”³⁴³

S. 214 creates a “safe harbor” for certain licensing agreements in which the provisions are limited to the market entry date for the generic drug and the payment of attorney’s fees.³⁴⁴ Other terms, such as exclusivity or mutual releases, would make the agreements presumptively illegal.³⁴⁵ Finally, the agreement is presumptively illegal if the generic manufacturer “gives anything of value” and “agrees to limit or forgo research, development or sales” of its product “for any period of time.”³⁴⁶

Parties to litigation may rebut the presumption of illegality with regards to their settlement by using the seven factors outlined in the prospective legislation, with the understanding that parties to a settlement can prove with a standard of clear and convincing evidence that the procompetitive effects of the RPS outweigh anticompetitive effects.³⁴⁷ The court would first compare the length of time remaining until the end of patent exclusivity with the market entry date established in the settlement.³⁴⁸ Second, the court must hear evidence on the value of competition to consumers from the generic product.³⁴⁹ The form and consideration received by the generic company in the settlement must also be scrutinized.³⁵⁰ The potential results of the patent litigation must be weighed as part of the decision: the revenue the generic would have received had it won the patent litigation at issue must be determined, as well as any losses the brand-name company would have suffered had it lost the litigation.³⁵¹ Finally, the elapsed time between the

343. *Id.*

344. *Id.*

345. *Id.*

346. *Id.*

347. *Id.*

348. *Id.*

349. *Id.*

350. *Id.*

351. *Id.*

settlement date and the settlement of the patent infringement case should be determined, along with any other factor the fact finder may deem relevant to the analysis of the competitive effects of the settlement.³⁵²

2. *S. 504: Fair and Immediate Release of Generic Drugs Act*

Spring 2013 saw a second legislative proposal from the Senate: the Fair and Immediate Release of Generic Drugs Act (“FAIR Generics Act”).³⁵³ Although the bill seeks to ban RPSs, much as S. 214 does, it uses a different strategy to achieve its goals. In essence, the bill functions by reducing incentives for the companies to enter into a settlement by precluding the generic first-to-file company from exercising its 180-day exclusivity period under Hatch-Waxman if it has entered into a “disqualifying agreement.”³⁵⁴ As such, generic applicants would only be eligible for exclusivity if they have not made an impermissible settlement with a brand-name manufacturer.³⁵⁵

Another provision of the legislation limits the terms on which brand-name and generic manufacturers may settle.³⁵⁶ Exclusivity is not permitted for settlements where the generic first filer agrees to not seek FDA approval of its ANDA application at the earliest possible date or where the generic first filer elects to not start marketing its pharmaceutical compound as soon as it receives approval from the FDA.³⁵⁷ Should there be more than one date where a generic ANDA applicant may seek FDA approval or begin marketing its compound, “the ANDA applicant can seek approval or begin commercial marketing on the earlier of the latest date set forth in the agreement or 180 days *after* ‘another first applicant’ begins commercial marketing.”³⁵⁸

Finally, under this proposed legislation, 35 U.S.C. § 271(e) is amended to state:

(7) The exclusive remedy under this section for an infringement of a patent for which the Secretary of Health and Human Services has

352. *Id.*

353. Fair and Immediate Release of Generic Drugs Act (“FAIR Generics Act”), S. 504, 113th Cong. (2013); Kevin E. Noonan, *Senators Introduce Another Bill to Ban Reverse Payment Settlement Agreements*, PATENT DOCS (Mar. 14, 2013 11:59 PM), <http://www.patentdocs.org/2013/03/senators-introduce-another-bill-to-ban-reverse-payment-settlement-agreements.html>.

354. Fair and Immediate Release of Generic Drugs Act (“FAIR Generics Act”), S. 504, 113th Cong. (2013).

355. *Id.*

356. *Id.*

357. *Id.*

358. Noonan, *supra* note 353.

published information pursuant to subsection (b)(1) or (c)(2) of section 505 of the Federal Food, Drug, and Cosmetic Act shall be an action brought under this subsection within the 45-day period described in subsection (j)(5)(B)(iii) or (c)(3)(C) of section 505 of the Federal Food, Drug, and Cosmetic Act.

Application of these provisions is limited to agreements subject to the amendments made by the Medicare Prescription Drug, Improvement and Modernization Act of 2003.

It is the responsibility of the prevailing party in the litigation to notify the FDA.³⁵⁹

3. *Evaluation of Potential Congressional Legislation*

Congress will likely follow a “wait-and-see” approach while the first cases to be analyzed under the new regime proceed through the court system. Aside from the fact that this method will require less work from Congress, Congress would be wise to avoid the imposition of one-size-fits-all legislation into settlements that will differ according to the unique parties and patents involved, which confer distinct benefits. However, electing not to impose more definite requirements on these settlements likely will result in the development of different doctrines in different courts. Potentially a circuit split similar to the split leading to the *Actavis* certiorari could form, leading to a lack of consistency and predictability for parties involved in patent litigation under Paragraph IV of the Hatch-Waxman Act.

That being said, all eight justices rejected S. 214’s stance on the presumptive illegality of reverse payment settlements in *Actavis*.³⁶⁰ There are certainly examples of reverse payment settlements that are legal; the FDA typically determines that approximately half of the filed settlements each year are potentially anticompetitive.³⁶¹ In addition, although it may be rational to

359. Fair and Immediate Release of Generic Drugs Act (“FAIR Generics Act”), S. 504, 113th Cong. (2013).

360. *FTC v. Actavis, Inc.*, 133 S. Ct. 2223 (2013).

361. FTC BUREAU OF COMPETITION, AGREEMENTS FILED WITH THE FEDERAL TRADE COMMISSION UNDER THE MEDICARE PRESCRIPTION DRUG, IMPROVEMENT, AND MODERNIZATION ACT OF 2003: OVERVIEW OF AGREEMENTS FILED IN FY 2011, *available at* <http://www.ftc.gov/sites/default/files/documents/reports/agreements-filed-federal-trade-commission-under-medicare-prescription-drug-improvement-modernization/1110mmaagree-2.pdf> (last visited Apr. 20, 2014); FTC BUREAU OF COMPETITION, AGREEMENTS FILED WITH THE FEDERAL TRADE COMMISSION UNDER THE MEDICARE PRESCRIPTION DRUG, IMPROVEMENT, AND MODERNIZATION ACT OF 2003: OVERVIEW OF AGREEMENTS FILED IN FY 2012, *available at* <http://www.ftc.gov/sites/default/files/documents/reports/>

put the burden of proving the legality of the settlement onto the parties actually transacting the settlement, the list of factors proposed in S. 214 to do so is extremely complex (even more so than those in *Actavis*'s rule-of-reason analysis). Courts may have a difficult time developing a coherent rationale for the application of these factors, and thus the outcome of litigation in a case relating to a reverse payment settlement will become very unpredictable.

Conversely, removing exclusivity incentives for settlements, as proposed in S. 504, may be a promising way to incentivize companies to consider alternatives to settlements.³⁶² Although one effect of this litigation would likely be to encourage more litigation of these settlements, this provision effectively supports a procompetitive rationale by removing a loophole for exclusivity from the Hatch-Waxman regime.

One potential problem arising from this legislation is that generic companies may be disincentivized to sue brand-name companies, knowing that they will not be able to settle if litigation becomes too expensive or time-consuming. As such, one of the main policy rationales behind the Hatch-Waxman Act—that generic companies may challenge the validity of certain brand-name patents, thereby removing “deadweight patents” from the marketplace—may not be adequately supported under this provision. The Hatch-Waxman framework encourages generics to sue even if the patent may actually be valid, because the potential rewards of winning the suit are so high for the generic company. Under this regime, generic companies will face greater risks in suing.

E. RECOMMENDATIONS AND SUGGESTED LEGISLATION

The goal in crafting legislation should be to discourage as many anticompetitive settlements as possible, while still encouraging generic companies to pursue ANDA applications where they believe the patents are invalid. But sham litigation has detrimental effects on judicial and overall market efficiency and should be avoided.³⁶³

Under *Actavis*, companies will likely consider their options more carefully before resorting to either litigation or settlements because of the potential consequences of a finding of an anticompetitive settlement in the courts.

agreements-filed-federal-trade-commission-under-medicare-prescription-drug-improvement-and/130117mmareport.pdf (last visited Apr. 20, 2014).

362. Fair and Immediate Release of Generic Drugs Act (“FAIR Generics Act”), S. 504, 113th Cong. (2013).

363. For a general review of the deleterious effects of sham litigation in the context of antitrust laws, see Thomas A. Balmer, *Sham Litigation and the Antitrust Laws*, 29 *BUFF. L. REV.* 39 (1980).

One potential solution to this dilemma may be to modify the exclusivity period a generic company receives, similar to the proposal in S. 504.³⁶⁴ Rather than eliminating the exclusivity period entirely, restricting the exclusivity period to ninety days through a modification to the Hatch-Waxman Act would move cheap drugs to the market more quickly, while also still providing generic companies a significant incentive to sue if a patent seems to be invalid. This limited approach would significantly decrease the motive to conduct sham litigation, as the potential financial reward to a generic company would decrease; litigation would only be reasonable to pursue if legitimate. In addition, if Congress shortened the exclusivity period, companies likely would consider shorter periods of delay in their lawful settlements and would likely discourage the formation of unlawful agreements because the amount of money to be split from the exclusivity period would be smaller.

Although the Supreme Court selected the rule-of-reason standard versus stricter standards, such as per se or quick-look, lower courts will face an analysis of the procompetitive and anticompetitive effects of these settlements for years to come. *Actavis* also mandates case-by-case analysis using the rule-of-reason standard. The PTO's current framework does not offer many potential quick fixes to the problem, as resources are too limited to effectively combat invalid patents at granting.³⁶⁵ Thus, congressional modification of the Hatch-Waxman Act, as proposed above, may be the most reasonable method to adjust the reverse payment settlement framework.

V. CONCLUSION

The Supreme Court's ruling in *FTC v. Actavis* indicated that reverse payment settlements may implicate antitrust liability for the parties entering into them if the settlements are intended to delay competition between brand-name and generic companies under Hatch-Waxman.³⁶⁶ It explained that lower courts should make this determination by using a modified antitrust rule-of-reason standard to analyze these settlements.³⁶⁷ Although the Court did not establish a presumptively unlawful standard for these settlements, different circuits will likely interpret the decision in different

364. Fair and Immediate Release of Generic Drugs Act ("FAIR Generics Act"), S. 504, 113th Cong. (2013).

365. *See supra* Section IV.A.

366. *FTC v. Actavis, Inc.*, 133 S. Ct. 2223, 2223 (2013).

367. *Id.* at 2237.

ways, as is already being demonstrated in the recent *In re Nexium*³⁶⁸ and *In re Lamictal*³⁶⁹ decisions. These interpretations may not be resolved without further litigation, perhaps before the Supreme Court. Accordingly, efforts to curtail settlements that may be anticompetitive may be focused at the PTO, where better prosecution of patents could limit the number of putatively invalid patents in litigation proceedings. The FTC will likely continue a strong focus on curbing reverse payment settlements, particularly those it deems to be anticompetitive. Congressional action will likely be slow while the court system spends the next several years parsing the ramifications of the *Actavis* decision.

In the meantime, settling parties should use the broad guidelines provided in *Actavis* to tailor their settlements. Under the *Actavis* standard, “the likelihood of a reverse payment bringing about anticompetitive effects depends upon its size, its scale in relation to the payor’s anticipated future litigation costs, its independence from other services for which it might represent payment, and the lack of any other convincing justification.”³⁷⁰ Lower courts will apply the modified rule-of-reason standard when a reverse payment settlement is challenged.³⁷¹

368. *In re Nexium* (Esomeprazole) Antitrust Litig., No. 12-md-02409-WGY, 2013 WL 4832176 (D. Mass. Sept. 11, 2013).

369. *In re Lamictal* Direct Purchaser Antitrust Litig., No 12-cv-995 (WHW), 2014 WL 282755 (D.N.J. Jan. 24, 2014).

370. *Actavis*, 133 S. Ct. at 2223.

371. *Id.* at 2238.

MISJOINDER OR MISHAP? THE CONSEQUENCES OF THE AIA JOINDER PROVISION

Dongbiao Shen[†]

In September 2011, Congress passed the Leahy-Smith America Invents Act (“AIA”), which substantially revised many aspects of U.S. patent law.¹ Among other changes, § 299 of the AIA created a new joinder statute restricting the ability of a patent holder to sue multiple unrelated defendants in the same proceeding.² One of the purported goals of § 299 was to preclude joinder of multiple defendants with only “tenuous connections to” the patent lawsuit.³ Before § 299, some district courts had permitted practically unlimited joinder of accused infringers, allowing patent plaintiffs, especially patent trolls (“trolls”), to limit defendants’ opportunities to present individualized positions.⁴ With the enactment of the AIA and § 299, patent plaintiffs may no longer join multiple defendants in a single litigation based solely on the allegation that the defendants all infringe the same patent.⁵ By eliminating the economies of scale that accompanied suing multiple defendants in one suit, Congress passed § 299 to “end[] the abusive practice of treating [unrelated parties] as codefendants” and reduce the number of meritless infringement suits brought by trolls.⁶

Since patent defendants have long complained that multi-defendant suits afford trolls unfair advantages in seeking favorable forums and extracting nuisance settlements,⁷ § 299 appeared to be a much-needed reform.⁸ Relying

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1. Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011) (codified in scattered sections of 35 U.S.C.).

2. 35 U.S.C. § 299 (2012).

3. H.R. REP. NO. 112-98, at 54 (2011) (“The Act also addresses problems occasioned by the joinder of defendants (sometimes numbering in the dozens) who have tenuous connections to the underlying disputes in patent infringement suits.”).

4. *See MyMail, Ltd. v. Am. Online, Inc.*, 223 F.R.D. 455 (E.D. Tex. 2004); *see also infra* Section I.A.

5. 35 U.S.C. § 299(a).

6. 157 CONG. REC. H4426 (daily ed. June 22, 2011) (statement of Rep. Bob Goodlatte); *see also infra* Section I.C.

7. GENERAL ACCOUNTABILITY OFFICE, INTELLECTUAL PROPERTY: ASSESSING FACTORS THAT AFFECT PATENT INFRINGEMENT LITIGATION COULD HELP IMPROVE

on post-AIA case statistics, this Note contends that § 299 has achieved a mixed result, accomplishing some measure of its intended purpose and meanwhile creating unintended consequences.⁹ Post-AIA patent plaintiffs frequently file multiple single-defendant suits instead of filing multi-defendant suits in the same district, and subsequently seek consolidation for pretrial purposes.¹⁰ Additionally, both patent holders and accused infringers are employing multidistrict litigation (“MDL”) to consolidate multiple single-defendant suits pending in different districts.¹¹ The absolute number of patent suits is up dramatically since the passage of the AIA, and there has been no noticeable decrease in patent infringement suits brought by trolls.¹² Therefore, while curbing the practice of joining unrelated defendants, § 299 also imposes inefficiencies and risks¹³ on courts and litigants that may be only partially circumvented by consolidation through known case management tools.¹⁴ These tools largely preserve the pre-AIA status quo leading up to trial for many post-AIA cases, which may explain why trolls are not severely

PATENT QUALITY (August 2013), available at <http://www.gao.gov/assets/660/657103.pdf> [hereinafter GAO REPORT]. The Report states that:

Some legal commentators, technology companies, the Federal Trade Commission (FTC), and Congress, among others, have raised concerns that patent infringement litigation by [non-practicing entities (“NPEs”)] is increasing and that this litigation, in some cases, has imposed high costs on firms that are actually developing and manufacturing products because NPEs generally face lower litigation costs than those they are accusing of infringement, NPEs are likely to use the threat of imposing these costs as leverage in seeking infringement compensation.

Id.; see also Maya M. Eckstein, Elizabeth L. Brooks & George B. Davis, *The (Unintended) Consequences of the ALA Joinder Provision*, AIPLA Spring Meeting (May 2012), available at http://www.hunton.com/files/Publication/c4abf2b5-ac78-4b18-8c65-8e02608284d8/Presentation/PublicationAttachment/0f8412f9-9d41-444d-8b47-90e694a54abe/AIPLA_Joinder_Paper.pdf (“Defendants have long complained that the joinder of multiple defendants . . . gives plaintiffs unfair advantages in cost and extracting settlements, and is a key reason for the ever-increasing number of patent suits filed by non-practicing entities . . .”).

8. “The expectations of this provision are high: many companies often sued for patent infringement by non-practicing entities (NPEs) believe the non-joinder provision will help curb the filing of patent litigation suits against them.” Marla Butler, *Strategies for Dealing with the Non-joinder Provision*, <http://www.rkmc.com/~media/PDFs/Strategies%20for%20dealing%20with%20the%20non%20joinder%20provision.pdf>.

9. See *infra* Part IV.

10. See *infra* Section III.B.1.

11. See *infra* Section III.B.2.

12. See *infra* Sections III.B, IV.A.

13. See *infra* Section IV.B.2.

14. See *infra* Section III.B.

discouraged from filing.¹⁵ However, § 299's restriction on "consolidation for trial" may provide real benefits for defendants, and may dissuade trolls from incurring the cost of multiple trials.¹⁶

This Note is organized into four Parts. Part I reviews the legal landscape that existed prior to the passage of § 299. It analyzes the conflicting interpretations of Rule 20 of the Federal Rules of Civil Procedure ("FRCP") and the rise of multi-defendant suits. It continues by discussing the legislative intent in adopting § 299. Part II explains the substantive standard of § 299 and the limitations to the scope of § 299. Part III examines how courts and litigants adjust to the new rule. It first reviews the impact of § 299 on multi-defendant suits. It then discusses the burden § 299 imposes on courts in judicial case management, and the litigation strategies that plaintiffs and defendants have adopted to deal with § 299, particularly pretrial consolidation through Rule 42(a) of the FRCP and MDL. Part IV discusses the volume and dynamics of patent litigation prior to and after the passage of the AIA. It contends that § 299 has achieved some measures of its success, but meanwhile creates unintended consequences such as raising cost and risks of patent litigation and impairing some defendants' interest in co-defending patent cases. It remains to be seen how § 299 affords defendants real benefits from separate trials.

I. BACKGROUND

Prior to the AIA, federal courts typically applied Rule 20 of the FRCP to determine when permissive joinder was appropriate in patent infringement suits.¹⁷ Section 299 replaced Rule 20 in most patent cases by creating a new statutory provision governing permissive joinder of accused patent infringers.¹⁸ Despite the radical change, Congress passed § 299 with sparse legislative history.¹⁹ Before analyzing § 299, this Note provides some relevant background on the reasons for Congress's enactment of § 299. Section I.A examines the inconsistent interpretations of the standard for permissive joinder in patent cases among district courts. Section I.B discusses the problems of forum shopping and the growth of multi-defendant lawsuits resulting from the inconsistent interpretations and application of Rule 20.

15. *See infra* Section IV.B.

16. *See infra* Section IV.B.1.c.

17. *See e.g.*, *MyMail, Ltd. v. Am. Online, Inc.*, 223 F.R.D. 455, 456 (E.D. Tex. 2004); *Rudd v. LUX Prods. Corp.*, No. 09-cv-6957, 2011 WL 148052, at *1 (N.D. Ill. Jan. 12, 2011).

18. 35 U.S.C. § 299 (2012).

19. *See* David O. Taylor, *Patent Misjoinder*, 88 N.Y.U. L. REV. 652, 656 (2013).

Following this discussion, Section I.C outlines the legislative history and the policy goals of § 299.

A. DISPARATE TREATMENT OF RULE 20

In determining the appropriateness of permissive joinder, Rule 20 requires a two-pronged test. Joinder is appropriate if:

(A) any right to relief is asserted against [the defendants] jointly, severally, or in the alternative with respect to or arising out of the same transaction, occurrence, or series of transactions or occurrences; and

(B) any question of law or fact common to all defendants will arise in the action.²⁰

The goal of Rule 20 is to “promote trial convenience and expedite the final determination of disputes, thereby preventing multiple lawsuits.”²¹

Courts typically find the second requirement of Rule 20 satisfied in cases where a patent is asserted against multiple defendants.²² Proper claim construction of the patent is a legal issue common to all defendants allegedly infringing the same patent.²³ Moreover, identical or substantially overlapping issues of fact exist as to the validity of the patent.²⁴ Therefore, common questions of law or fact apply to accused infringers of the same patent.

Courts, however, have split on how to apply the first “same transaction and occurrence” requirement. Most courts have found that merely accusing multiple parties of infringement of the same patent does not constitute the “same transaction or occurrence” under Rule 20; instead, courts read the rule as requiring that defendants engage in related activities or act in concert, or that the accused products are very similar.²⁵ Adopting this view, courts have

20. Fed. R. Civ. P. 20(a)(2).

21. *Mosley v. Gen. Motors Corp.*, 497 F.2d 1330, 1332 (8th Cir. 1974).

22. *See* Eckstein, Brooks & Davis, *supra* note 7, at 3.

23. *See* Jake Holdreith, *IP: The Failure of Venue and Joinder Reform in Patent Litigation*, INSIDE COUNSEL (Apr. 9, 2013), <http://www.insidecounsel.com/2013/04/09/ip-the-failure-of-venue-and-joinder-reform-in-pate?t=ip>.

24. *See id.*

25. *See, e.g.*, *Rudd v. LUX Prods. Corp.*, No. 09-cv-6957, 2011 WL 148052, at *3 (N.D. Ill. Jan. 12, 2011) (following “the prevailing approach of this District and numerous others that have concluded that a party fails to satisfy Rule 20(a)’s requirement of a common transaction or occurrence where unrelated defendants, based on different acts, are alleged to have infringed the same patent”); *Interval Licensing LLC v. Am. Online, Inc.*, No. C10-1385, 2011 WL 1655713, at *2 (W.D. Wash. Apr. 29, 2011) (granting motion to sever since each defendant “operates differently and offers products that often compete with those of other Defendants”); *WIAV Networks, LLC v. 3COM Corp.*, No. C 10-03448, 2010 WL

found misjoinder even in instances where the alleged infringement conformed to a common industrial standard,²⁶ possessed similar characteristics,²⁷ or operated in similar manners.²⁸

On the other hand, the Eastern District of Texas had adopted a much more lenient joinder standard that essentially combined the two-pronged test into one requiring only common questions of law.²⁹ In *MyMail, Ltd. v. AOL, Inc.*, the Eastern District of Texas allowed joinder of unrelated defendants who were alleged to have infringed the same patent.³⁰ There, plaintiff MyMail, Ltd. sued multiple defendants for infringing the same patent relating to accessing a computer network.³¹ Certain defendants moved to sever and transfer the actions, arguing that “acts of infringement by separate defendants” did not arise out of the same transaction or occurrence.³² The court rejected the defendants’ argument, finding that the transaction or occurrence requirement is satisfied where “there is some connection or logical relationship between the various transactions or occurrences,” and a logical relationship “exists if there is some nucleus of operative facts or law.”³³ Because the “legal question as to the . . . patent’s scope” leads to a “nucleus of operative facts or law,” the court concluded that joinder was proper.³⁴ The court further cited “the goals of Rule 20” and maintained that severance would “decrease judicial efficiency by requiring duplicitous claim constructions, discovery, and pretrial motions.”³⁵ While acknowledging severance could be appropriate if “[accused infringers’] methods or products were dramatically different,” the court rejected “a rule that requires separate

3895047 (N.D. Cal. Oct. 1, 2010) (dismissing *sua sponte* all but the first named defendant and commenting that each defendant was “simply . . . thrown into a mass pit with others to suit plaintiff’s convenience”).

26. *WLAV Networks LLC*, 2010 WL 3895047, at *2.

27. *Pergo, Inc. v. Alloc, Inc.*, 262 F. Supp. 2d 122, 128 (S.D.N.Y. 2003) (explaining that “the fact that two parties may manufacture or sell similar products, and that these sales or production may have infringed the identical patent owned by the plaintiffs is not sufficient to join unrelated parties as defendants in the same lawsuit pursuant to Rule 20(a)”).

28. *Rudd*, 2011 WL 148052, at *3 (holding that plaintiffs failed to satisfy Rule 20(a)’s requirement based on allegations that “[d]efendants’ alleged infringing thermostats operate in a nearly identical manner as it relates to the asserted patents”).

29. *Id.* at *2 (describing the *MyMail* rule as “eviscerat[ing] the same transaction or occurrence requirement [of Rule 20] and mak[ing] it indistinguishable from the requirement that there be a common question of law or fact”).

30. *MyMail, Ltd. v. Am. Online, Inc.*, 223 F.R.D. 455, 456 (E.D. Tex. 2004).

31. *Id.* at 455.

32. *Id.*

33. *Id.*

34. *Id.*

35. *Id.* at 457–58.

proceedings simply because unrelated defendants are alleged to have infringed the same patent” as a “per se rule that elevates form over substance.”³⁶

Following the *MyMail* decision, a few district courts including the District of Kansas and the Eastern District of Louisiana adopted this lenient interpretation of Rule 20, allowing patent plaintiffs, especially trolls, to join numerous defendants in a single complaint.³⁷ As discussed in Section I.B below, different joinder standards among district courts cause undesirable consequences.

B. FORUM SHOPPING AND THE RISE OF MULTI-DEFENDANT SUITS BEFORE THE AIA

The divergent interpretations and applications of Rule 20 led to forum shopping and the rise of multi-defendant lawsuits filed by trolls.³⁸ Patent plaintiffs favor courts with lenient joinder standards, like the Eastern District of Texas, because multi-defendant suits afforded them many advantages. Multi-defendant suits allow patent plaintiffs to sue a large number of defendants in a single forum without having to bear the burden of managing multiple lawsuits that may otherwise be pending in different jurisdictions.³⁹ Moreover, joining defendants in the same suit allows patent plaintiffs to establish patent validity and claim construction at a single venue, reducing the risk of issue preclusion.⁴⁰ Furthermore, the presence of many defendants in the suit also makes it difficult for defendants to transfer a case to a more convenient venue.⁴¹ Patent plaintiffs will join larger number of geographically diverse defendants in a patent plaintiff-friendly venue, rendering no other venue more convenient for all or most of the defendants; therefore, a court

36. *Id.* at 457.

37. *See, e.g.*, *Sprint Commc'ns Co. v. TheGlobe.com, Inc.*, 233 F.R.D. 615 (D. Kan. 2006); *Mannatech, Inc. v. Country Life, LLC*, No. 3:10-CV-533-O, 2010 WL 2944574 (N.D. Tex. July 26, 2010); *Alford Safety Servs., Inc. v. Hot-Hed, Inc.*, No. 10-1319, 2010 WL 3418233 (E.D. La. Aug. 24, 2010).

38. *See Taylor*, *supra* note 19, at 659.

39. *See id.* (“The patent owner benefits by paying only one filing fee; creating economies of scale related to the processing and review of documents produced by accused infringers; avoiding repetitive defensive discovery and briefing; consolidating expert report preparation and discovery; and preparing and bringing fact and expert witnesses to hearings and trials once rather than multiple times.”).

40. The asserted patents will face multiple assessments of validity if the patent plaintiff brings individual patent lawsuits against different accused infringers. Once a patent is declared invalid, the patent plaintiff is estopped from asserting it against other accused infringers. However, if a patent is declared valid, accused infringers in subsequent lawsuits can still challenge the validity of the patent.

41. *See Taylor*, *supra* note 19, at 677–78.

will likely permit the case to remain in its original venue chosen by the plaintiffs.⁴²

Along with forum shopping is a “trend towards an excess number of parties [that] unnecessarily multiplies the complexity of already-complex litigation.”⁴³ Patent plaintiffs named “almost four times more accused infringers” in the Eastern District of Texas,⁴⁴ as compared to those filed in the Northern District of California,⁴⁵ from 2008 to the effective date of § 299 in 2011. Moreover, during that time period, the average number of defendants named in the Eastern District of Texas complaints “steadily increased” while the number in the Northern District of California “remained relatively constant.”⁴⁶

Trolls, a subset of non-practicing entities (“NPEs”),⁴⁷ effectively took advantage of this litigation strategy by trading on the defendants’ litigation cost, anchoring defendants in ill-suited venues, and extracting settlements and inflated license fees.⁴⁸ Trolls exist solely to own and assert patents, and

42. See Holdreith, *supra* note 23 (“The presence of many defendants in the suit (usually including some from the chosen venue) made it hard to transfer the case to a different venue, because no venue would be more convenient for the whole group of joined defendants.”); see also Charles Gorenstein, *America Invents Act Exercises “Con-Troll” Over Patent Litigation*, IP WATCHDOG (Sept. 19, 2011), <http://www.ipwatchdog.com/2011/09/19/control-over-patent-litigation/id=19279/> (“With no individual venue likely being particularly appropriate for all of the collective defendants, the default would often be to permit the action to remain in the ill-suited venue originally chosen by the plaintiff.”).

43. Randall R. Rader, Chief Judge, Court of Appeals for the Federal Circuit, *The State of Patent Litigation*, at 6, Address at the Eastern District Texas Bench Bar Conference (Sept. 27, 2011), available at <http://www.patentlyo.com/files/raderstateofpatentlit.pdf>.

44. Taylor, *supra* note 19, at 690.

45. *Id.* The Northern District of California and the Eastern District of Texas are the top districts in terms of numbers of patent case filing. However, unlike the Eastern District of Texas, the Northern District of California adopted a more restrictive view of Rule 20. See *WIAV Networks, LLC v. 3COM Corp.*, No. C 10–03448, 2010 WL 3895047 (N.D. Cal. Oct. 1, 2010).

46. Taylor, *supra* note 19, at 690.

47. NPEs include individual inventors, universities, failed start-ups, and patent monetization entities (“PMEs”). The criticisms in the press on “patent troll” issues generally apply to PMEs, but not other categories of NPEs. See GAO REPORT, *supra* note 7, at 2–3; see also Christopher A. Cotropia, Jay P. Kesani & David L. Schwartz, *Patent Assertion Entities (PAEs) Under the Microscope: An Empirical Investigation of Patent Holders As Litigants*, at 6 (Nov. 10, 2013) (unpublished draft), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2346381.

48. See Tracie L. Bryant, *The America Invents Act: Slaying Trolls, Limiting Joinder*, 25 HARV. J.L. & TECH. 687, 691 (2012) (“Patent trolls commonly rely on the litigation strategy of joining multiple, unrelated defendants in the same patent infringement suit . . . to reduce their litigation costs . . . [and] ensure a favorable venue . . .”).

do not use their patents to provide any products or services.⁴⁹ One favored tactic of trolls is to initiate lawsuits against a large number of defendants within an entire industry or across industries where the only commonality among defendants is the alleged infringement of the same patent.⁵⁰ Defendants have complained about these unfair advantages, arguing that they largely contribute to the ever-increasing number of patent suits filed by trolls.⁵¹

C. LEGISLATIVE HISTORY AND POLICY GOAL OF § 299

Although the legislative history of § 299 is sparse, it is clear that Congress passed the statute to address the problems of the disparate standards regarding Rule 20 among district court judges. The House Report for the bill states that “Section 299 legislatively abrogates the construction of Rule 20(a) adopted in [seven cases, five of which are from Texas, including the *MyMail* case]—effectively conforming these courts’ jurisprudence to that followed by a majority of jurisdictions.”⁵² Similarly, Senator Jon Kyl stated that § 299 “effectively codifies current law as it has been applied everywhere outside of the Eastern District of Texas.”⁵³ By resolving the conflicting interpretations of Rule 20 joinder requirement, § 299 responds to concerns about forum shopping favoring some federal district courts, particularly the Eastern

49. *See id.* at 690 (noting that an NPE is “‘nonpracticing’ because it does not manufacture products or otherwise make use of the invention”; instead, it “acquire[s] patents only to license or enforce them against companies using the invention”); *see also* Mike Masnick, *President Obama Admits that Patent Trolls Just try to ‘Extort’ Money; Reform Needed*, TECHDIRT (Feb. 14, 2013, 2:45 PM), <http://www.techdirt.com/articles/20130214/14351821988/president-obama-admits-that-patent-trolls-just-try-to-extort-moneyreform-needed.shtml> (noting that patent trolls “don’t actually produce anything themselves,” and that they are “just trying to essentially leverage and hijack somebody else’s idea and see if they can extort some money out of them”). Despite many arguments against trolls, some contend that trolls encourage innovation by helping inventors monetize their patents. *See Bryant, supra* note 48, at 693–94.

50. *See* Charles R. Macedo, Michael J. Kasdan & David A. Boag, *ALA’s Impact on Multidefendant Patent Litigation: Part 1*, LAW360 (Oct. 19, 2012, 12:48 PM), *available at* <http://www.law360.com/articles/387456/aia-s-impact-on-multidefendant-patent-litigation-part-1>.

51. *See* Eckstein, Brooks & Davis, *supra* note 7, at 2.

52. H.R. REP. NO. 112-98, at 55 n.61 (2011). In addition to *MyMail, Ltd. v. Am. Online, Inc.*, 223 F.R.D. 455 (2004), other cases cited include: *Sprint Commc’ns Co. v. TheGlobe.com, Inc.*, No. 05–2433, 233 F.R.D. 615 (D. Kan. 2006); *Adrain v. Genetec Inc.*, No. 2:08–CV–423, 2009 WL3063414 (E.D. Tex. September 22, 2009); *Better Educ. Inc. v. elnstruction Corp.*, No. 2–08–cv–446, 2010 WL 918307 (E.D. Tex. March 10, 2010); *Mannatech, Inc. v. Country Life, LLC*, No. 3:10–CV–533–O, 2010 WL 2944574 (N.D. Tex. July 26, 2010); *Alford Safety Servs., Inc. v. Hot-Hed, Inc.*, No. 10–1319, 2010 WL 3418233 (E.D. La. August 24, 2010); and *Eolas Techs, Inc. v. Adobe Sys., Inc.*, No. 6:09–CV–446, 2010 WL 3835762 (E.D. Tex. September 28, 2010).

53. 157 CONG. REC. S5429 (daily ed. Sept. 8, 2011) (statement of Sen. Jon Kyl).

District of Texas.⁵⁴ As noted by Senator Charles Schumer, “56 percent—more than half—of all the business method patent litigation goes to one district, the Eastern District of Texas, which is known to be extremely favorable to plaintiffs.”⁵⁵

The legislative history also suggests that another leading rationale for passing the statute was to stem the tide of multi-defendant patent lawsuits. The House Report states that “[t]he Act also addresses problems occasioned by the joinder of defendants (sometimes numbering in the dozens) who have tenuous connections to the underlying disputes in patent infringement suits.”⁵⁶ In discussing the bill, Congressman Goodlatte stated that “one of the driving goals of [the] legislation was to reduce patent litigation abuses,”⁵⁷ and described the bill as ending “the abusive practice of treating as codefendants parties who make completely different products and have no relation to each other.”⁵⁸ During Senate floor debate, Senator Jon Kyl stated that this new section bars joinder of accused infringers “if the only common fact and transaction among the defendants is that they are alleged to have infringed the same patent.”⁵⁹ He further commented on § 299’s bar on consolidation of separate trials, emphasizing that “Section 299’s purpose of allowing unrelated patent defendants to insist on being tried separately would be undermined” if parties could “simply consolidate their cases for trial under Rule 42.”⁶⁰

While not specifically identified in the legislative history, it is reasonable to infer that § 299 meant to reduce the number of meritless NPE lawsuits by curbing the practice of joining multiple defendants in a single lawsuit. The American Bar Association noted that “prior to passage of the act, Congress heard testimony from multiple witnesses decrying NPEs’ allegedly abusive practice of naming dozens of defendants in a single lawsuit to extort settlements over questionable patents.”⁶¹ One witness who testified in favor

54. Taylor, *supra* note 19, at 659.

55. 157 CONG. REC. S5402, 5410 (daily ed. Sept. 8, 2011) (statement of Sen. Charles Schumer).

56. H.R. REP. NO. 112-98, at 54 (2011).

57. *Hearing on H.R. 1249 Before the H. Comm. on the Judiciary*, 112th Cong. 63 (2011) (statement of Rep. Bob Goodlatte, Member, H. Comm. on the Judiciary), available at <http://judiciary.house.gov/hearings/pdf/04142011MarkupTranscript.pdf>.

58. 112 CONG. REC. H4426 (daily ed. June. 22, 2011) (statement of Rep. Bob Goodlatte).

59. 157 CONG. REC. S5429 (daily ed. Sept. 8, 2011) (Statement of Sen. Jon Kyl).

60. *Id.*

61. Chandran B. Iyer & Ryan M. Corbett, *Joinder Limitations in the America Invents Act: Big Change?*, A.B.A. INTEL. PROP. LITIG., Winter 2012, available at <http://apps.americanbar.org/litigation/committees/intellectual/articles/winter2012-joinder-limitations-america-invents-act.html>.

of § 299 stated that “[t]his change will limit a NPE’s ability to haul dozens of unrelated defendants into an inappropriate jurisdiction.”⁶² After enactment of the AIA, commentators trumpeted the laudable goal of § 299, stating that § 299 “was intended to raise the litigation costs of non-practicing entities in an effort to reduce litigation by such entities.”⁶³

II. SECTION 299

After the passage of the AIA, § 299 of the Patent Act states:

(a) Joinder of Accused Infringers.— With respect to any civil action arising under any Act of Congress relating to patents, other than an action or trial in which an act of infringement under section 271 (e)(2) has been pled, parties that are accused infringers may be joined in one action as defendants or counterclaim defendants, or have their actions consolidated for trial, only if—

(1) any right to relief is asserted against the parties jointly, severally, or in the alternative with respect to or arising out of the same transaction, occurrence, or series of transactions or occurrences relating to the making, using, importing into the United States, offering for sale, or selling of the same accused product or process; and

(2) questions of fact common to all defendants or counterclaim defendants will arise in the action.

(b) Allegations Insufficient for Joinder.— For purposes of this subsection, accused infringers may not be joined in one action as defendants or counterclaim defendants, or have their actions consolidated for trial, based solely on allegations that they each have infringed the patent or patents in suit.

(c) Waiver.— A party that is an accused infringer may waive the limitations set forth in this section with respect to that party.⁶⁴

Subsection (a) of § 299 modified both prongs of Rule 20. Subsection (a)(1) adds the requirement that the same transaction(s) and occurrence(s) “relat[e] to the making, using, importing into the United States, offering for

62. *Review of Recent Judicial Decisions on Patent Law: Hearing Before the Subcommittee on Intellectual Property, Competition, and the Internet of the House Committee on the Judiciary*, 112th Cong. 68–69 (2011) (statement of John Boswell, Senior Vice President and General Counsel, SAS Institute).

63. Katherine Moerke, *Challenges to Multi-Defendant Lawsuits Based on the ALA’s Joinder Provision*, LEXOLOGY (Dec. 15, 2011), <http://www.lexology.com/library/detail.aspx?g=85abb03c-f3d8-401a-8536-480befeba3e8>; see also Bryant, *supra* note 49.

64. 35 U.S.C. § 299 (2012).

sale, or selling of *the same accused product or process*.”⁶⁵ Thus joinder is appropriate under § 299 only if the accused product or process is “the same.”⁶⁶ In addition, although a common question of “law or fact” will suffice for permissive joinder purposes under Rule 20, § 299 requires that “*questions of fact* common to all defendants or counterclaim defendants will arise in the [single] action.”⁶⁷ Suits with only common questions of law but not common questions of fact thus may not be joined under § 299.

Section 299 also qualifies Rule 42(a) governing the consolidation of multiple lawsuits in patent infringement cases. Rule 42(a) broadly states that “[i]f actions before the court involve a common question of law or fact, the court may . . . consolidate the actions.”⁶⁸ In contrast, § 299 replaces the simple test articulated in Rule 42(a) with the two-prong permissive joinder analysis discussed above. The new standard is more difficult to meet. Under § 299, “parties that are accused infringers may . . . have their actions consolidated for trial” only if the “same accused product or process” and common “questions of fact” requirements are satisfied.⁶⁹

Subsection (b) explicitly prohibits joining defendants or consolidating for trial based solely on the alleged infringement of the same patents. This subsection further qualifies the joinder and consolidation standard under Subsection (a), and essentially “abrogates” the interpretation of Rule 20 adopted by *MyMail* courts.⁷⁰

Section 299 also includes a waiver provision in subsection (c) allowing accused infringers to waive the restrictions on permissive joinder and consolidation for trial.⁷¹ However, the Act does not specify the circumstances by which the waiver may be triggered, nor does the Act clarify whether waiver may be implied by the conduct of the alleged infringers.⁷² In any

65. 35 U.S.C. § 299(a)(1) (emphasis added).

66. *Id.*

67. 35 U.S.C. § 299(a)(2) (emphasis added).

68. Fed. R. Civ. P. 42(a) states that “[i]f actions before the court involve a common question of law or fact, the court may: (1) join for hearing or trial any or all matters at issue in the actions; (2) consolidate the actions; or (3) issue any other orders to avoid unnecessary cost or delay.”

69. 35 U.S.C. § 299(a).

70. H.R. REP. No. 112-98, at 55 n.61 (2011).

71. 35 U.S.C. § 299(c).

72. See SCOTT W. BURT, BARRY F. IRWIN, JONATHAN B. TROP, INTELLECTUAL PROP. OWNERS ASS'N, IPO LITIG. COMM., IMPACT OF MISJOINDER PROVISION OF THE AMERICA INVENTS ACT 20, available at http://www.ipo.org/wp-content/uploads/2013/03/whitepaper_misjoinder1.pdf.

event, if defendants find there is a strategic advantage to consolidate their actions for trial, they may invoke the waiver provision.⁷³

There are at least three limitations to the scope of § 299.⁷⁴ First, § 299 applies only to “any civil action arising under any Act of Congress relating to patents.”⁷⁵ Proceedings before the International Trade Commission (“ITC”) are not subject to § 299 because ITC investigations are not civil actions under Title 35 of the United State Code.⁷⁶ Secondly, the joinder restriction does not apply to actions alleging infringement under the Hatch-Waxman Act at 35 U.S.C. § 271(e)(2).⁷⁷ Thus, patent holders can sue for infringement based on defendants’ application for pre-marketing regulatory approval of relevant drugs or veterinary biological products without being subject to § 299.⁷⁸ Lastly, although § 299 precludes a patent plaintiff from joining unrelated defendants or from seeking to consolidate multiple actions for trial, § 299 does not prevent consolidation of multiple cases for pretrial purposes.⁷⁹ Thus consolidation of multiple cases in MDL or coordination of multiple cases within a single district for pretrial matters such as claim construction and discovery is still allowed.⁸⁰

III. ADJUSTING TO THE NEW RULE

Section 299 appears to have had a dramatic impact on the filing of multi-defendant patent lawsuits. There was a spike in patent lawsuit filings in the Eastern District of Texas as patent holders rushed to file under the old

73. *See id.* at 21–22.

74. *See id.* at 10–11.

75. 35 U.S.C. § 299(a).

76. *See* Thomas Martin, *The International Trade Commission—A More Desirable Venue for Patent Infringement Actions in the Wake of the America Invents Act*, 10 BAKER BOTTS INTELL. PROP. REP. 2, Feb. 2013, available at http://www.bakerbotts.com/file_upload/IPReport201302-TheInternationalTradeCommission.htm.

77. 35 U.S.C. § 299(a) (applying “to any civil action arising under any Act of Congress relating to patents, other than an action or trial in which an act of infringement under *section 271(e)(2)* has been pled”) (emphasis added).

78. Under 35 U.S.C. § 271(e)(2), submitting an application for regulatory approval is actionable if it is done for the purpose of engaging in commercial activity before expiration of the relevant patent. This provision, however, only applies to allegations of infringement related to drugs and veterinary biological products. 35 U.S.C. § 271(e)(2).

79. Section 299 states “parties that are accused infringers may be joined in one action as defendants or counterclaim defendants, or have their actions consolidated *for trial* . . .” 35 U.S.C. § 299(a) (emphasis added).

80. *See infra* Part IV.

system before § 299 went into effect.⁸¹ Since the AIA took effect, most patent plaintiffs have decided to avoid the issue of joinder, instead filing individual lawsuits against defendants on the same patents.⁸² This Part examines how courts and litigants have adjusted to the new joinder rule. Section III.A discusses the application of § 299 in increasingly rare occasions where a patent plaintiff continued the practice of joining multiple parties. Section III.B discusses the more common practice in which patent plaintiffs file separate suits, then considers emerging litigation strategies that accompany such practice.

A. THE IMPACT OF § 299 ON MULTI-DEFENDANT SUITS

Post-AIA, courts must reject joinder if the plaintiff fails to show that the alleged infringement arises out of the same transaction or occurrence or deals with the “the same accused product or process.”⁸³ For example, in *Net Navigation Systems LLC v. Cisco Systems Inc.*, a court in the Eastern District of Texas granted defendants’ motion to sever, holding that mere “sameness of the accused product,” without a finding of “same transaction or occurrence,” is insufficient to meet the joinder standard.⁸⁴ There, plaintiff Net Navigation Systems filed suit against Cisco and AT&T, alleging that defendants infringe its patents by making, using, or selling the “Cisco Accused Products.”⁸⁵ The court acknowledged that the accused products are the same and there is some relationship between Cisco and AT&T.⁸⁶ However, the court found the joinder improper, reasoning that “the nature of [defendants’] relationship” is unclear and thus there is no “evidence indicating that the claims against [Cisco and AT&T] arise out of the same transaction, occurrence” relating to the accused products.⁸⁷

Similarly, in *Digitech Image Technologies, LLC v. Agfaphoto Holding GmbH*, the Central District of California adopted a restrictive reading of the same product and common transaction standards, and granted defendants’ motion

81. See BURT, IRWIN & TROP, *supra* note 72, at 12 (showing a spike in filings in the two weeks before the AIA effective date, where “the weekly average number of [patent case] filings more than doubled from 43 to 100”).

82. See George D. Medlock Jr. & David Frist, *Joinder: Over a Year after the America Invents Act*, 5 LANDSLIDE, no. 4, Mar.–Apr. 2013, available at http://www.americanbar.org/publications/landslide/2012_13/march_april/joinder_over_year_after_america_invents_act.htm.

83. 35 U.S.C. § 299(a).

84. No. 4:11-CV-660, 2012 WL 7827543, at *3 (E.D. Tex. Aug 22, 2012).

85. *Id.* at *1.

86. *Id.* at *3.

87. *Id.* at *3–4.

to sever for misjoinder.⁸⁸ There, plaintiff Digitech joined forty-five defendants including both manufacturers and retailers of various digital cameras that allegedly infringed Digitech's patent.⁸⁹ One defendant, Leica, moved to dismiss or sever for misjoinder under Section 299.⁹⁰ The court granted Leica's motion and held that mere similarities between the accused infringing products do not satisfy the "same accused product" requirement for joinder.⁹¹ The court went even further by refusing the joinder of manufacturers and retailers who sold identical products in the stream of commerce.⁹² In so holding, the court distinguished between a manufacturer's sale of the accused product to a retailer and a retailer's subsequent downstream sale of the product.⁹³ The court also rejected Digitech's argument that it had no choice but to join all possible infringers in the same action, since claim preclusion might foreclose its opportunity to bring those claims in the future. The court reasoned that, contrary to Digitech's belief, claim preclusion would not apply under those circumstances because Digitech was obligated to proceed against each defendant individually, rather than in groups.⁹⁴

Although multi-defendant suits are more likely to be severed under AIA, some courts have allowed joinder when alleged infringers have a close relationship and the accused products or process are the same. For example, in *Omega Patents, LLC v. Skypatrol, LLC*, the Southern District of Florida denied a motion to sever claims against Skypatrol from claims against codefendant Enfora where Enfora was alleged to have supplied the accused product to Skypatrol.⁹⁵ The court found that joinder was proper under the AIA because Skypatrol "reconfigures, modifies, and rebrands the same product" that was manufactured by Enfora.⁹⁶ The court determined that the "established relationship" between Skypatrol and Enfora weighs in favor of joinder and noted that severance would not promote judicial economy.⁹⁷ Similarly, in *Mednovus, Inc. v. Qinetiq Group PLC*, the Central District of California severed certain defendants who "do not share in the same

88. No. 8:12-cv-1153-ODW, 2012 WL 4513805, at *1 (C.D. Cal. Oct. 1, 2012).

89. *Id.*

90. *Id.*

91. *Id.* at *3.

92. *Id.* at *1.

93. *Id.* at *3-4.

94. *Id.*

95. No. 1:11-cv-24201, 2012 WL 2339320, at *1-2 (S.D. Fla. June 19, 2012).

96. *Id.* at *2.

97. *Id.* at *2 n.3.

transaction” while maintaining two defendants that had a “close relationship” in which one defendant was the other’s spinoff and licensee.⁹⁸

Courts have also allowed joinder of all claims against codefendants even when only some of the claims meet the joinder requirement of § 299. In *Motorola Mobility, Inc. v. TiVo, Inc.*, the Eastern District of Texas held that two counterclaim defendants were properly joined because one counterclaim overlapped.⁹⁹ In so holding, the court reasoned that under the AIA, “complete commonality of all claims i[s] not required as long as at least one claim overlaps among all of the defendants.”¹⁰⁰ Likewise, in *Omega*, the Southern District of Florida interpreted § 299 to state that “so long as joinder is appropriate for one or more claims, misjoinder will not result due to the presence of one or more independent infringement claims against only one of the defendants.”¹⁰¹ The court therefore held that all claims against Skypatrol were properly joined since some of the claims overlapped.¹⁰²

B. CASE MANAGEMENT CHALLENGES AND LITIGATION STRATEGIES UNDER § 299

As discussed in Section III.A, it is increasingly rare (and difficult) for patent plaintiffs to name multiple defendants in the same infringement litigation. Instead, patent plaintiffs are filing multiple single-defendant suits involving the same patents.¹⁰³ For example, the average number of defendants in patent cases in the Eastern District of Texas from September 17, 2011, to October 25, 2011, is 2.5, a sixty-seven percent reduction compared to the 7.6 average number of defendants in cases filed in the same district during the same period in 2010.¹⁰⁴

98. No. 2:12-cv-03487, 2012 WL 4513539, at *3 (C.D. Cal. Oct. 1, 2012). The court also found that two buyers, ETS–Lindgren and Invivo, could not be joined with the supplier Metrasens merely because they purchased the accused product from Metrasens for resale. *Id.* at *3.

99. No. 5:11–CV–53–JRG, 2012 WL 2935450, at *2 (E.D. Tex. July 18, 2012).

100. *Id.*

101. *Omega Patents, LLC v. Skypatrol, LLC*, No. 1:11-cv-24201, 2012 WL 2339320, at *2 (S.D. Fla. June 19, 2012).

102. *Id.*

103. For example, Unified Messaging Solutions, LLC filed fourteen lawsuits on same patents on March 1, 2012, including nine in the Northern District of Illinois; Maxim Integrated Products, Inc. filed ten lawsuits between January 6 and February 23, 2012, all in the Eastern District of Texas; ArrivalStar, S.A. filed sixty-nine lawsuits between September 16, 2011 and March 20, 2012, including forty-four in the Southern District of Florida and eighteen in the Northern District of Illinois. ECKSTEIN, BROOKS & DAVIS, *supra* note 7, at 7.

104. Sasha Rao & Daniel Keese, *Aftershocks From The AIA: A Seismic Shift in Patent Law?*, LAW360 (March 26, 2012, 1:02 PM), available at http://www.ropesgray.com/files/upload/20120403_Aftershocks_From_The_AIA.pdf.

The shift from multi-defendant suits to single-defendant suits has resulted in a dramatic increase in the absolute number of patent suits post-AIA. As shown in Table 1, RPX Corporation, a provider of patent risk management services, reported that patent cases filed in 2012 was up forty percent from 2011 and eighty-seven percent from 2010.¹⁰⁵ Similarly, data collected from Lex Machina shows that plaintiffs filed 5,418 patent infringement cases in 2012, almost double the number of patent cases filed in 2010.¹⁰⁶

Table 1: Total number of patent cases

	2009	2010	2011	2012
RPX	2,304	2,525	3,374	4,731
Lex Machina	2,502	2,714	3,530	5,418

The proliferation of individual lawsuits on the same patents burdens both courts and litigants. To circumvent the cost and inefficiency imposed by the heavier caseload, courts and litigants are increasingly relying on known procedural mechanisms, such as consolidation of pretrial proceedings under Rule 42(a) or MDL, to ease judicial administration and reduce the possibility of inconsistent rulings.¹⁰⁷

105. Data was collected from RPX CORP., 2012 NPE ACTIVITY REPORT (2012), available at <http://www.rpxcorp.com/siteFiles/SiteManager/0BF995E82CFF591EE80EFE8AC69259E7.pdf> [hereinafter RPX REPORT].

106. Data was collected from LEX MACHINA, <https://law.lexmachina.com> (last visited Feb. 21, 2014) (the number of patent case filings is listed under “cases filed by year” on the homepage) (LEX MACHINA is a secure website without immediate access). The small discrepancy between data from RPX and Lex Machina may be explained by different methodologies employed in these two databases.

107. See *In re EMC Corp.*, 677 F.3d 1351, 1360 (Fed. Cir. 2012). The court in *In re EMC Corp.* stated that:

In exercising its discretion, the district court should keep in mind that even if joinder is not permitted under Rule 20, the district court has considerable discretion to consolidate cases for discovery and for trial under Rule 42 where venue is proper and there is only ‘a common question of law or fact.’ Common pretrial issues of claim construction and patent invalidity may also be adjudicated together through the multidistrict litigation procedures of 28 U.S.C. § 1407.

Id. (citations omitted).

1. *Consolidating Pretrial Proceedings Under Rule 42(a)*

Section 299 imposes limitations on consolidation “for trial.”¹⁰⁸ However, the statute, on its face, does not prevent consolidation of multiple cases for purposes of pretrial activities.¹⁰⁹ Thus, courts in post-AIA patent cases are relying more on Rule 42(a) to consolidate potentially dispositive pretrial issues such as discovery, claim construction, and summary judgments.¹¹⁰ Consolidation “is permitted as a matter of convenience and economy in administration, but does not merge the suits into a single cause, or change the rights of the parties, or make those who are parties in one suit parties in another.”¹¹¹ Typically multiple cases filed by the same plaintiff alleging infringement of the same patents will be assigned to the same judge if cases are filed in the same courts.¹¹² While courts may sever misjoined defendants under § 299, they nonetheless may consolidate actions for pretrial purposes.¹¹³ Once consolidated, the cases will likely proceed just as they would have before the passage of § 299, at least during the pretrial stage.¹¹⁴ However, each case will be tried separately—if the litigation proceeds to that stage—as § 299 strictly precludes “consolidation for trial.”¹¹⁵

For example, in *Norman IP Holdings, LLC*, the Eastern District of Texas initially severed twenty-two defendants that had been misjoined, but soon after it consolidated those cases for pretrial purposes.¹¹⁶ There, Plaintiff Norman IP Holdings filed its complaint the day before the AIA came into effect but subsequently added twenty-three additional defendants over the next few months.¹¹⁷ Thirteen of the newly added defendants brought

108. 35 U.S.C. § 299(a) (2012).

109. *Id.*

110. *See, e.g.*, *Norman IP Holdings, LLC v. Lexmark Int’l, Inc.*, Nos. 6:12cv508, 6:11-CV-495, 2012 WL 3307942 (E.D. Tex. Aug. 10, 2012).

110. *Id.* at *1.

111. *Johnson v. Manhattan Ry. Co.*, 289 U.S. 479, 496–97 (1933).

112. *See* MANUAL FOR COMPLEX LITIGATION § 20.11 (4th ed. 2004) (providing, in part that “[a]ll related civil cases pending in the same court should initially be assigned to a single judge to determine whether consolidation, or at least coordination of pretrial proceedings, is feasible and is likely to reduce conflicts and duplication”).

113. *See, e.g.*, *Norman IP Holdings*, 2012 WL 3307942, at *4.

114. *See* Charles R. Macedo, Michael J. Kasdan & David A. Boag, *ALA’s Impact on Multidefendant Patent Litigation: Part 2*, LAW360 (Oct. 26, 2012, 12:34 PM), <http://www.law360.com/articles/387458/aia-s-impact-on-multidefendant-patent-litigation-part-2> (“[I]his early run of pretrial consolidations suggests that pretrial life under the AIA for purposes of joinder may closely resemble the pretrial state of affairs before the AIA.”).

115. 35 U.S.C. § 299 (2012).

116. *Norman IP Holdings*, 2012 WL 3307942, at *4.

117. *Id.* at *1.

motions to sever and transfer under § 299.¹¹⁸ The court granted severance, acknowledging that “unrelated defendants in this case were improperly joined and should either be dismissed from the case or severed into their own cases.”¹¹⁹ However, after severing the pertinent defendants into separate cases, the court immediately ordered all “newly severed actions consolidated with the original filed case as to all issues, except venue, through pretrial only.”¹²⁰ The court reasoned that separate discovery proceedings would “waste[] judicial resources by requiring common issues to be addressed individually for each case,” and held the consolidation appropriate under Rule 42.¹²¹

Many jurisdictions have followed the Eastern District of Texas and consolidated separate actions involving common patents for pretrial proceedings.¹²² For example, in *Tammsaura Group, LLC v. NBTY Inc.*, the Central District of California ordered that seventy independent cases be “coordinated” for case management purposes.¹²³ The court noted that it would “issue one protective order and one scheduling order to govern all of the cases,” and carefully pointed out that the order only constituted a determination of consolidation for pretrial proceedings, but not consolidation for trial.¹²⁴

Conversely, courts have refused pretrial consolidation when the defendants are totally unrelated or have competing interests. In *One-E-Way, Inc v. Plantronics, Inc.*, the Central District of California found that the defendants had been misjoined because “[t]he fact that some of the products incorporate the same wireless technology does not alter the fact that Plaintiff brings suit against unrelated defendants for independent acts of infringement”; the court subsequently dropped four of the five defendants.¹²⁵ The court rejected the plaintiff’s request to consolidate cases for pretrial purposes under Rule 42(a).¹²⁶ In so holding the court reasoned “the

118. *Id.*

119. *Id.* at *3.

120. *Id.* at *4.

121. *Id.*

122. *See, e.g.*, *SoftView LLC v. Apple Inc.*, No. 10-389, 2012 WL 3061027, at *11 (D. Del. Jul. 26, 2012) (consolidating newly severed cases for all pre-trial purposes); *Rotatable Techs. LLC v. Nokia*, No. 2:12-CV-265, 2013 WL 3992930 (E.D. Tex. Aug. 2, 2013) (consolidating cases for construction of the disputed claim terms at issue).

123. No. 8:12-cv-1655 at *1 (C.D. Cal. Oct. 5, 2012), *available at* <https://law.lexmachina.com/documents/4000211097> (last visited Feb 21, 2014).

124. *Id.*

125. No. 2:11-cv-06673, at *2 (C.D. Cal. Jan. 19, 2012) *available at* <https://law.lexmachina.com/documents/4000211101> (last visited Feb 21, 2014).

126. *Id.* at *3.

defendants—who may have competing interests and strategies—also are entitled to present individualized assaults on questions of non-infringement, invalidity, and claim construction.”¹²⁷ Similarly, in *Body Science LLC v. Boston Scientific Corp.*, the Northern District of Illinois granted a motion to sever, but refused to consolidate the cases upon severance, reasoning that consolidation “will not promote judicial economy or efficiency” since defendants are “entirely different companies” with different accused products.¹²⁸

Overall, the practice of pretrial consolidation for patent cases under Rule 42(a) has become increasingly common. For example, the Northern District of California issued seventy-six consolidation orders for cases filed in 2012,¹²⁹ and seventy-two consolidation orders for cases filed in 2013¹³⁰—a seventy percent increase compared to the yearly average of forty-three consolidation orders for cases filed from 2009 to 2010.¹³¹ More significantly, the Eastern District of Texas issued 381 consolidation orders for cases filed in 2013,¹³² more than nine times the yearly average of forty-two consolidation orders for cases filed from 2009 to 2010.¹³³ This sharp increase in the number of

127. *Id.*

128. 846 F. Supp. 2d 980, 991 (N.D. Ill. 2012).

129. Data was collected from LEX MACHINA, <https://law.lexmachina.com> (last visited Feb. 14, 2014) (follow “cases” hyperlink; then put “consolidation order” in the search box, choose “patent” under “Case types” tab, choose “from 2012-01-01 to 2012-12-31” under “Filed on” tab, choose “N.D.Cal” under “Courts” tab; then click “search” tab) (LEX MACHINA is a secure website without immediate access).

130. Data was collected from LEX MACHINA, <https://law.lexmachina.com> (last visited Feb. 14, 2014) (follow “cases” hyperlink; then put “consolidation order” in the search box, choose “patent” under “Case types” tab, choose “from 2013-01-01 to 2013-12-31” under “Filed on” tab, choose “N.D.Cal” under “Courts” tab; then click “search” tab) (LEX MACHINA is a secure website without immediate access).

131. Data was collected from LEX MACHINA, <https://law.lexmachina.com> (last visited Feb. 14, 2014) (follow “cases” hyperlink; then put “consolidation order” in the search box, choose “patent” under “Case types” tab, choose “from 2009-01-01 to 2010-12-31” under “Filed on” tab, choose “E.D.Texas” under “Courts” tab; then click “search” tab) (LEX MACHINA is a secure website without immediate access).

132. Data was collected from LEX MACHINA, <https://law.lexmachina.com> (last visited Feb. 14, 2014) (follow “cases” hyperlink; then put “consolidation order” in the search box, choose “patent” under “Case types” tab, choose “from 2013-01-01 to 2013-12-31” under “Filed on” tab, choose “E.D.Texas” under “Courts” tab; then click “search” tab) (LEX MACHINA is a secure website without immediate access).

133. Data was collected from LEX MACHINA, <https://law.lexmachina.com> (last visited Feb. 14, 2014) (follow “cases” hyperlink; then put “consolidation order” in the search box, choose “patent” under “Case types” tab, choose “from 2009-01-01 to 2010-12-31” under “Filed on” tab, choose “E.D.Texas” under “Courts” tab; then click “search” tab) (LEX MACHINA is a secure website without immediate access).

consolidation orders is consistent with the marked increase in caseloads in the Eastern District of Texas post-AIA.¹³⁴

Although defendants in several cases have argued that the AIA precludes consolidation under Rule 42, even for pretrial purposes, courts have generally rejected this argument. In *C. R. Bard, Inc. v. Medical Components, Inc.*, the District of Utah found that “the America Invents Act remains silent on *pre* trial consolidation” and concluded that “the AIA does not affect the authority of a court to order pretrial consolidation of related patent cases” under Rule 42(a).¹³⁵

Therefore, when multiple single-defendant suits on the same patent are pending in a single district, pretrial consolidation under Rule 42(a) illustrates a potential end-run around § 299. On the other hand, when multiple single-defendant suits on the same patent are pending in multiple districts, both plaintiffs and defendants are considering another end-run around § 299: MDL consolidation for “[c]ommon pretrial issues of claim construction and patent invalidity” under 28 U.S.C. § 1407.¹³⁶

2. Consolidating Pretrial Proceedings Under MDL

Parties may also request the Judicial Panel on Multidistrict Litigation (“the Panel”) to transfer the cases pending in multiple districts to a single district court and consolidate them for pretrial purposes. Congress enacted the MDL statute under 28 U.S.C. § 1407 in 1968, which permits “consolidated pretrial proceedings” when “civil actions involving one or more common questions of fact are pending in different districts.”¹³⁷ The statute aims to increase the “convenience of parties and witnesses” and “promote the just and efficient conduct of . . . actions” by eliminating inconsistent rulings and reducing the costs associated with litigating multiple similar suits in different districts.¹³⁸ The Panel is the sole judicial body that determines whether cases ultimately proceed to MDL.¹³⁹ The Panel consists of seven circuit and/or district judges appointed by the Chief Justice of the United States, and meets once every two months to determine whether

134. In 2010, 283 patent cases were filed in the Eastern District of Texas. In 2013, the number of patent cases filed in in the Eastern District of Texas increased to 1,497. *See infra* Table 4.

135. *C.R. Bard, Inc. v. Med. Components, Inc.*, No. 2:12-cv-00032, 2012 WL 3060105, at *1–2 (D. Utah Jul. 25, 2012) (concluding that pretrial consolidation is not “violative of the spirit of the AIA”).

136. *In re EMC Corp.*, 677 F.3d 1351, 1360 (Fed. Cir. 2012).

137. 28 U.S.C. § 1407(a) (2012).

138. *Id.*

139. *Id.*

transfer to MDL is proper by a concurrence of at least four of the seven judges.¹⁴⁰

a) Panel Procedure

Transfer to MDL may be initiated by the Panel *sua sponte* or by motion filed by a party to the action.¹⁴¹ If a party initiated the transfer, the moving party must file a motion for transfer with the Panel and file a copy of the motion in the district court where the action is originally pending.¹⁴² The Panel will send notice to all parties potentially affected by the transferred proceedings, including the time and place of hearing to determine whether transfer is proper.¹⁴³ Parties are able to present their positions in front of the Panel during hearings, which are normally limited to twenty minutes per matter.¹⁴⁴

The standard for pretrial consolidations used in MDLs is lenient compared to the consolidation standard under § 299. The former only requires that the cases involve common questions of fact.¹⁴⁵ Facts relating to the validity or enforceability of an asserted patent will therefore suffice to meet the consolidation standard for MDL.¹⁴⁶ On the other hand, § 299 requires common questions of fact arising out of transactions or occurrences related to “the same accused product or process.”¹⁴⁷

If the Panel approves transfer for MDL, the Panel will select the transferee district court and assign the cases to one or more judges within the transferee district.¹⁴⁸ Therefore, unlike consolidation under Rule 42(a) or § 299, which occurs in the district of the patent plaintiff’s choosing, consolidation in MDLs occurs in a district determined by the Panel to be the most convenient. The transferee judge will then decide how to consolidate or handle the transferred cases.¹⁴⁹

140. *Id.* § 1407(d).

141. *Id.* § 1407(c).

142. *Id.*

143. *Id.*

144. See Paul M. Janicke, *The Judicial Panel on Multidistrict Litigation: Now a Strengthened Traffic Cop for Patent Venue*, 32 REV. LITIG. 497, 510–11 (2013).

145. 28 U.S.C. § 1407(a).

146. See *In re Bear Creek Techs., Inc.*, (‘722) Patent Litig., 858 F. Supp. 2d 1375, 1378–79 (J.P.M.L. 2012).

147. See 35 U.S.C. § 299(a).

148. 28 U.S.C. § 1407(b).

149. See *In re Equity Funding Corp. of Am. Sec. Litig.*, 375 F. Supp. 1378, 1384 (J.P.M.L. 1974) (“It is the province of the transferee judge to determine whether and to what extent the pretrial proceedings should be coordinated or consolidated.”).

A party may appeal the Panel order if transfer is granted. To do so, the party must petition for an extraordinary writ in the United States Circuit Court of Appeals with jurisdiction over the transferee district.¹⁵⁰ However, parties may not appeal any Panel decision denying transfer.¹⁵¹

When the issue is pending before the Panel or after a transfer order has been entered, similar cases may be subsequently filed in different district courts. These new actions are termed “tag-along actions.”¹⁵² If a transfer order has been made, the Panel usually issues a conditional transfer order moving the tag-along actions to the transferee judge as well. But the Panel’s involvement is unnecessary. A party may request “assignment of such action to the Section 1407 transferee judge in accordance with applicable local rules.”¹⁵³ The transferee judge determines how the tag-along actions will be incorporated into the ongoing proceedings.¹⁵⁴

Section 1407 specifies that transfer is for “pretrial proceedings” purposes only.¹⁵⁵ Thus if a trial is needed, each case must go back to its original district.¹⁵⁶ However, trial in the original district does not occur often in patent cases.¹⁵⁷ Most patent cases are resolved while in the transferee district and before trial, as the transferee court is empowered to dismiss cases, to issue consent judgments, and, most importantly, to issue summary judgment rulings.¹⁵⁸ Therefore, most of the action will take place before the MDL court rather than being remanded back to the transferor courts.

150. 28 U.S.C. § 1407(e). Section 1407(e) states:

No proceedings for review of any order of the panel may be permitted except by extraordinary writ pursuant to the provisions of title 28, section 1651, United States Code Petitions for an extraordinary writ to review an order to transfer or orders subsequent to transfer shall be filed only in the court of appeals having jurisdiction over the transferee district. There shall be no appeal or review of an order of the panel denying a motion to transfer for consolidated or coordinated proceedings.

Id.

151. *Id.*

152. R.P. U.S. J.P.M.L. Rule 7.1(a).

153. R.P. U.S. J.P.M.L. Rule 7.2(a).

154. *In re* Equity Funding Corp., 375 F. Supp. 2d. at 1384.

155. 28 U.S.C. § 1407(a).

156. *In re* Bear Creek Techs., Inc., (‘722) Patent Litig., 858 F. Supp. 2d 1375, 1378 (J.P.M.L. 2012) (citing *Lexecon, Inc. v. Milberg Weiss Bershad Hynes & Lerach*, 523 U.S. 26, 34 (1998)).

157. *See Janicke, supra* note 144, at 513.

158. *See id.*

b) Consolidating Pretrial Proceedings Under MDL

The Panel routinely relies on § 1407 to transfer and consolidate patent infringement cases.¹⁵⁹ Since 1968, the Panel has decided more than 130 motions to consolidate patent infringement cases.¹⁶⁰ The average grant rate is around sixty-seven percent.¹⁶¹

The MDL panel has ruled that the AIA joinder provision does not apply to centralization under § 1407.¹⁶² For instance, in *In re Bear Creek Techs, Inc.*, the panel considered fourteen separate actions filed in three district court jurisdictions, each alleging infringement of the same patent.¹⁶³ Although the *Bear Creek* defendants argued that the MDL proceeding amounted to an “end run” around the AIA, the Panel disagreed, ordering the consolidation of those actions in the Delaware district court.¹⁶⁴ It concluded that even though the AIA prohibits consolidation for trial, it does not forbid consolidation for pretrial purposes.¹⁶⁵ The Panel reasoned that had Congress intended for the AIA to affect MDL, it would have amended § 1407 directly.¹⁶⁶

Table 2: Panel orders on patent litigation cases from 2009 to 2013

	Filed by Defendant (granted)	Filed by Plaintiff (granted)	Percentage (granted /total)
2009-09-16 to 2011-09-15	5 (3)	6 (5)	72.7% (8/11)
2011-09-16 to 2013-09-15	6 (5)	10 (6)	68.7% (11/16)

As Table 2 shows, the Judicial Panel has seen its MDL filing in patent cases increase modestly since the AIA was enacted.¹⁶⁷ In the two years

159. *See, e.g., In re TR Labs Patent Litig.*, 896 F. Supp. 2d 1337 (J.P.M.L. 2012); *In re Body Science LLC Patent Litig.*, 883 F. Supp. 2d 1344 (J.P.M.L. 2012); *In re Maxim Integrated Prods., Inc. Patent Litig.*, 867 F. Supp. 2d 1333 (J.P.M.L. 2012).

160. *See* BURT, IRWIN & TROP, *supra* note 72, at 18.

161. *Id.*

162. *In re Bear Creek Techs., Inc.*, (‘722) Patent Litig., 858 F. Supp. 2d 1375, 1378–79 (J.P.M.L. 2012).

163. *Id.* at 1375.

164. *Id.* at 1379.

165. *Id.* at 1378.

166. *Id.*

167. Panel orders were collected from Bloomberg Law, <https://www.bloomberglaw.com> (follow “Dockets” hyperlink under “Search & Browse” tab; then search “U.S. Judicial Panel on Multidistrict Litigation Dockets” for “Courts,”

preceding the enactment of the AIA, the Panel issued eleven orders on patent cases with an average of approximately 5.5 cases per year.¹⁶⁸ In the two years following the AIA's enactment, the panel issued sixteen orders on patent cases with an average of eight cases per year, which is up about forty-five percent over the pre-AIA average.¹⁶⁹ Interestingly, both patent plaintiffs and defendants have sought to transfer and consolidate cases under § 1407, and the distribution of filings of both parties remain almost unchanged.¹⁷⁰ Of these cases, fifty-five percent (six out of eleven total) of the motions were filed by plaintiffs prior to the AIA, as compared to 62.5 percent (ten out of sixteen total) post-AIA.¹⁷¹ This suggests that both plaintiffs and defendants see a strategic advantage to consolidating pretrial proceedings under certain conditions. Furthermore, the percentage of cases granted transfer post-AIA (68.7 percent) remains almost unchanged as compared to the percentage pre-AIA (72.7 percent).¹⁷²

Two important factors the Panel considers in deciding consolidation are (1) the degree of commonality of issues in the various cases and (2) the stage of the respective litigations.¹⁷³ The Panel is more likely to grant MDL consolidation when there are common issues and when the procedural postures of the various cases are similar.¹⁷⁴ For example, in *In re Maxim Integrated Prods.*, the Panel considered fourteen separate actions in which the plaintiff alleged infringement of the same five patents related to mobile commerce.¹⁷⁵ It ultimately ordered centralization of the actions in the Western District of Pennsylvania after finding that they shared “common questions of fact.”¹⁷⁶ Initially, plaintiff Maxim (“Maxim”) filed ten patent infringement suits against individual defendants in 2012, all in the Eastern District of Texas, alleging that the defendants infringed its patents related to mobile commerce.¹⁷⁷ Maxim later filed a motion for transfer and consolidation of all of the cases in the Eastern District of Texas under § 1407 after several other entities filed declaratory judgment actions against Maxim

search “patent” in “keywords”; then click “search” tab). Collected cases do not include those deemed motion moot or motion withdrawn.

168. *See supra* Table 2.

169. *See id.*

170. *See id.*

171. *See id.*

172. *See id.*

173. *See Janicke, supra* note 144, at 511.

174. *See id.*

175. *In re Maxim Integrated Prods., Inc.*, 867 F. Supp. 2d 1333, 1333 (J.P.M.L. 2012).

176. *Id.* at 1335.

177. *Id.* at 1336–37.

in other judicial districts.¹⁷⁸ The responding parties opposed centralization, arguing that “any common factual issues among the actions are subsumed by unique factual issues presented by each defendant.”¹⁷⁹ The Panel, however, in view of convenience and efficiency, granted Maxim’s motion and transferred all the actions to the Western District of Pennsylvania.¹⁸⁰ In so holding, the Panel emphasized that transfer does not “require a complete identity or even a majority of common factual or legal issues as a prerequisite.”¹⁸¹ Since the actions “involve common factual questions concerning the background of the patents and the subject matter,” the court found that centralization will “reduce the number of potentially inconsistent rulings and create significant efficiencies over respondents’ proposed fragmented approach.”¹⁸²

Conversely, in *Brandywine*, the panel denied patentee’s motion to centralize thirty-four pending infringement actions.¹⁸³ The actions involved similar allegations of infringement of six patents belonging to Brandywine, and the panel acknowledged that there was “undoubtedly factual overlap among these actions.”¹⁸⁴ However, the court noted that the patentee’s trend of quickly settling many of its prior lawsuits weighed against centralization.¹⁸⁵ Moreover, the difference in procedural postures of the various cases also argued against centralization.¹⁸⁶ Specifically, the court noted that it would not favor the patentee’s efforts to “lock in” a single favorable claim construction obtained before MDL consolidation and apply it to each of the defendants via centralization.¹⁸⁷ Accordingly, the panel denied patentee’s motion to centralize, noting: “[c]entralization of these actions is unlikely to result in the just and efficient conduct of the litigation as a whole.”¹⁸⁸

Overall, the Panel will likely rule against centralization if there is significant procedural disparity,¹⁸⁹ if litigation history suggests that many

178. *Id.* at 1333.

179. *Id.* at 1334.

180. *Id.* at 1335–36.

181. *Id.* at 1334.

182. *Id.*

183. *In re Brandywine Commc’ns Techs., LLC, Patent Litig.*, 959 F. Supp. 2d 1377, 1379 (J.P.M.L. 2013).

184. *Id.* at 1378.

185. *Id.* at 1378–79.

186. *Id.* at 1379.

187. *Id.*

188. *Id.*

189. *See, e.g., id.* (noting that “the procedural posture of these actions makes it less likely that they will benefit from centralization” since “two of the actions are quite advanced, with a claim construction order recently issued in the first-filed action in the Middle District of Florida and briefing on claim construction concluded in the action pending in the Northern District of California”); *In re Droplets, Inc., Patent Litig.*, 908 F. Supp. 2d 1377, 1378

actions have been quickly dismissed,¹⁹⁰ if informal coordination is practical among defendants because only a few defendants or districts (i.e., typically fewer than four) are involved,¹⁹¹ or if the benefits for common discovery may be limited.¹⁹² The Panel will also likely rule against centralization if the disputed issues lack commonality, such as terms in dispute are not identical from action to action (although there is some overlap)¹⁹³ or parties have not determined the specific nature of that alleged infringement¹⁹⁴ or certain defendants have idiosyncratic, potentially dispositive defenses that will implicate significant unique facts.¹⁹⁵ The Panel considers all those factors, and none of the above-mentioned factors is dispositive.¹⁹⁶

(J.P.M.L. 2012) (denying transfer due to a finding that “not all actions are in their ‘infancy’” and a *Markman* hearing had been scheduled in one action); *In re Oplus Techs., Ltd.*, Patent Litig., 899 F. Supp. 2d 1373, 1373 (J.P.M.L. 2012) (denying transfer upon finding that “one of the actions is already steadily progressing, with a *Markman* hearing scheduled”); *but see In re Unified Messaging Solutions LLC*, Patent Litig., 883 F. Supp. 2d 1340, 1342 (J.P.M.L. 2012) (granting transfer despite the fact that some actions had already scheduled *Markman* hearing and are more procedurally advanced than the remaining actions).

190. *See, e.g., In re Brandywine Communications*, 2013 WL 4048510, at *1 (noting that “[o]f these seventy actions, more than half already have been dismissed voluntarily by Brandywine as a result of early settlements”); *In re ArrivalStar S.A. Fleet Mgmt. Sys.* Patent Litig., 802 F. Supp. 2d 1378, 1379 (J.P.M.L. 2011) (noting that “the trend of quick dismissals in most actions suggests that the advantages centralization typically affords—i.e., reducing duplicative discovery and motion practice, etc.—may not be relevant to most litigants”); *In re Genetic Techs. Ltd.* Patent Litig., 883 F. Supp. 2d 1337, 1337 (J.P.M.L. 2012) (noting that “most actions that have been filed in the past several years have not required significant judicial attention”).

191. *See, e.g., In re Droplets*, 908 F. Supp. 2d at 1378 (noting that “informal coordination among the three involved courts seems practicable—just as it does among the parties, given that Droplets is represented in all actions by the same law firm”); *In re Oplus Techs.*, 899 F. Supp. 2d at 1373 (“With so few involved defendants and only a limited number of common claims and patents [six defendants allegedly infringing two patents] in dispute, it appears that informal cooperation among the parties and coordination among the involved judges is a feasible alternative to transfer.”).

192. *See, e.g., In re Genetic Techs.*, 883 F. Supp. 2d at 1338 (noting that “the opportunities for common discovery may be more limited here than in other circumstances because the inventor of the common patent” passed away and other major witness was abroad).

193. *See, e.g., In re Charles R. Bobo Patent Litig.*, 829 F. Supp. 2d 1374, 1375 (J.P.M.L. 2011) (noting, in an order denying transfer, that actions in one district court “involve other patents that are not part of the same patent family”).

194. *See, e.g., In re Select Retrieval, LLC*, Patent Litig., 883 F. Supp. 2d 1353, 1354 (J.P.M.L. 2012) (noting, in an order denying transfer, that “the litigation has not progressed to a point that the parties have determined the specific nature of that alleged infringement or to what extent infringement allegations will be common to the defendants across these actions”).

195. *See, e.g., In re Genetic Techs.*, 883 F. Supp. 2d at 1338 (explaining that “weighing in favor of denying centralization is that certain defendants have idiosyncratic potentially dispositive defenses that will implicate significant unique facts”); *In re ArrivalStar*, 802 F.

IV. DISCUSSION

Section 299 significantly restricts the ability of a patent plaintiff to sue multiple unrelated defendants in the same proceeding. A patent plaintiff may join multiple defendants only if each defendant made or used the same product or process and was involved in the “same transaction and occurrence.”¹⁹⁷ Otherwise the plaintiff must sue the defendants separately. The restrictive joinder standard was intended to correct joinder abuse in patent litigation and reduce the number of meritless infringement suits brought by trolls.¹⁹⁸ But is § 299 achieving its intended purpose? This Part answers this question by taking a quantitative approach to analyzing the volume and dynamics of patent litigation prior to and after the enactment of the AIA. It continues by further arguing that § 299 has achieved some measures of success, but also imposes a variety of inefficiencies and risks on courts and litigants that can only be partially addressed by known procedural mechanisms.

A. VOLUME AND DYNAMICS OF PATENT LITIGATION PRE- AND POST-AIA

Table 3 summarizes the patent case filings by NPEs from the databases of Patent Freedom and RPX, both of which advise businesses facing potential or actual NPE litigation.¹⁹⁹ Both Patent Freedom and RPX report that the total number of patent cases filed by NPEs has increased significantly from 2010 to 2012.²⁰⁰ This steep increase appears to be caused by NPEs’ shifting from filing multi-defendant suits to filing multiple single-defendant suits.²⁰¹

A close look at the number of defendants sued by NPEs reveals that § 299 has failed to deter NPEs from filing patent suits. According to Patent Freedom, the number of defendants sued by NPEs did not decrease, but

Supp. 2d at 1379 (noting that “the diversity of defendants’ businesses may hinder the alleged infringers’ ability to adopt common positions regarding the interpretation of common claims of the various patents”).

196. See Janicke, *supra* note 144, at 511.

197. 35 U.S.C. § 299(a) (2012).

198. See *supra* Section I.C.

199. See RPX REPORT, *supra* note 105; see also *Litigations Over Time*, PATENT FREEDOM (Feb. 7, 2014), <https://www.patentfreedom.com/about-npes/litigations/> (containing summary data on NPE assertions).

200. See *infra* Table 3.

201. See *supra* Part III.

instead slightly increased from 2010 to 2013.²⁰² A similar trend is observed in the RPX report, where the number of defendants sued by NPEs in 2012 also increased as compared to the number in 2010.²⁰³

Table 3: Total Cases filed by NPEs and Defendants Sued by NPEs

	Patent Freedom ²⁰⁴				RPX ²⁰⁵			Cotropia ²⁰⁶	
	2010	2011	2012	2013	2010	2011	2012	2010	2012
Cases by NPEs	632	1,252	3,025	3,466	765	1,551	3,054	400	1,959
Number of defendants sued by NPEs	4048	5,378	4,229	4,400	4,170	5,329	4,351	3,179	3,698

Professor Cotropia's article reported a similar trend that more defendants are sued by trolls post-AIA.²⁰⁷ Unlike the Patent Freedom and RPX reports, which do not differentiate among the various types of NPEs,²⁰⁸ the authors of the Cotropia article distinguished various types of NPEs and classified them into different types such as operating companies, patent holding companies, large patent aggregators, and individual inventors.²⁰⁹ The authors found that the number of lawsuits filed by patent holding companies increased most dramatically, rising from 408 in 2010 to 1,959 in 2012.²¹⁰ Yet, the number of unique patent plaintiffs does not change much from 2010 to 2012 (1,610 in 2010 compared to 1,696 patent plaintiffs in 2012), and the distribution amongst the various patent plaintiff types is nearly identical for

202. See *infra* Table 3. The increase in 2011 followed by decline in 2012 resulted from the enactment of the America Invents Act, which prompted a rush to the courthouse among patent plaintiffs to file before the new rules were effective. Arguably, many of the cases filed in September 2011 would have otherwise been filed later in 2011, and some of them may likely have been filed in 2012.

203. See *infra* Table 3; see also RPX REPORT, *supra* note 105, at 11.

204. See *Litigations Over Time*, *supra* note 199.

205. See RPX REPORT, *supra* note 105, at 11.

206. See Cotropia, Kesan & Schwartz, *supra* note 47, at 17–19.

207. *Id.* at 19.

208. For example, the RPX reports consider all the following entities as NPEs: “(1) Patent assertion entities (PAEs): entities believed to earn revenue predominantly through asserting patents; (2) Universities and research institutions; (3) Individual inventors; (4) Non-competing entities (NCEs): operating companies asserting patents outside their areas of products or services.” But it is patent holding companies purchasing patents in order to monetize who are criticized, not other entities such as individual inventors or universities. See RPX REPORT, *supra* note 105, at 7.

209. Cotropia, Kesan & Schwartz, *supra* note 47, at 12.

210. *Id.* at 17.

each year.²¹¹ Similarly, the number of defendants stayed constant between 2010 (11,671) and 2012 (11,604).²¹² Among these defendants, the number of parties sued by trolls increased slightly from 3,179 in 2010 to 3,698 in 2012, and the number of parties sued by individuals decreased from 1,320 in 2010 to 927 in 2012.²¹³ These data indicate that although § 299 has indeed forced patent plaintiffs to file multiple single-defendant suits instead of multi-defendant suits, it has failed to deter trolls from filing suits. Nor has it decreased the number of defendants involved in troll suits.

Table 4: Patent Filings in Major District Courts (and Percentages of the Total)²¹⁴

	2010	2011	2012	2013
C.D. California	216 (8%)	308 (9%)	499 (9%)	399 (6.5%)
N.D. California	175 (6.4%)	217 (6%)	260 (5%)	249 (4%)
E.D. Texas	283 (10.4%)	414 (12%)	1,248 (23%)	1,497 (24.5%)
Delaware	253 (9.3%)	484 (14%)	1,002 (18%)	1,336 (21.9%)
N.D. Illinois	172 (6.3%)	215 (6%)	236 (4%)	222 (3.6%)

Another noticeable trend is that patentees are filing more cases in the District of Delaware, although the Eastern District of Texas remains the top district in terms of patent filings.²¹⁵ The move towards Delaware may be partially explained by the opportunity for intra-district coordination of cases as a large number of companies are incorporated in Delaware.²¹⁶ The concern

211. *Id.* at 17–18.

212. *Id.* at 19.

213. *Id.*

214. Data was collected from LEX MACHINA, <https://law.lexmachina.com> (last visited Feb. 14, 2014) (follow “Courts & Judges” tab; then follow individual court under “Top 5 Courts by Case filings”) (LEX MACHINA is a secure website without immediate access).

215. *See supra* Table 4.

216. Patent infringement suits may be brought in the judicial district where the defendant resides. *See* 28 U.S.C. § 1400. Residency is defined in 28 U.S.C §1391:

For all venue purposes . . . (2) an entity with the capacity to sue and be sued in its common name under applicable law, whether or not incorporated, shall be deemed to reside, if a defendant, in any judicial district in which such defendant is subject to the court’s personal jurisdiction with respect to the civil action in question

Id. § 1391(c). Besides the opportunity of intra-district coordination, there are other reasons why patent plaintiffs might prefer the Eastern District of Texas and Delaware. For example, cases in the Eastern District of Texas and Delaware are more likely to reach trial compared to those in other district courts; moreover, patent plaintiffs in the Eastern District of Texas

about forum shopping remains salient as patent plaintiffs still rush to file patent cases in the Eastern District of Texas and the District of Delaware.²¹⁷ In 2010, they were the top two district courts handling the most patent cases.²¹⁸ In 2012 and 2013, these two courts remained the most popular courts chosen by patent plaintiffs and handled even greater percentages of patent cases.²¹⁹

B. SECTION 299 ACHIEVED A MIXED RESULT

Relying on the post-AIA case statistics,²²⁰ this section contends that § 299 has achieved a mixed result. Section IV.B.1 describes that § 299 has accomplished some of its intended purposes by stemming the tide of multi-defendant lawsuits, affording defendants higher success rate of transfer of venue, and more trial time to present their cases. Viewed from a different angle, Section IV.B.2 contends that § 299 also created unintended, negative consequences by raising costs of patent litigation, impairing some defendants' interest in co-defending patent cases, negatively impacting patent holders other than trolls, and increasing the likelihood of inconsistent rulings.

1. *Section 299 Has Achieved Some Measure of Success*

Multi-defendant suits provide patent plaintiffs, including trolls, advantages in cost and leverage to extract settlements. Section 299 tilts the playing ground toward defendants by limiting multi-defendant suits, making transfer of venue easier, and tightening the standard of consolidation for trial.

a) The Decline of Multi-Defendant Suits

Section 299 ended the lenient joinder standard adopted by the *MyMail* courts. Shortly after the AIA was enacted, the Federal Circuit also took up the issue of joinder standard in the *In re EMC Corp.* case, which raised the permissive joinder standard under Rule 20 by requiring more than a plaintiff's alleging similar accused products.²²¹

In *In re EMC*, Oasis Research LLC sued eighteen different companies for patent infringement prior to the enactment of the joinder statute.²²²

and Delaware enjoy a higher-than-average plaintiff win rate. See Mark A. Lemley, *Where to File Your Patent Case*, 38 AIPLA Q.J. 401, 410–43 (2010).

217. See *supra* Table 4.

218. See *id.*

219. See *id.*

220. See *supra* Tables 1–4.

221. *In re EMC Corp.*, 677 F.3d 1351, 1360 (Fed. Cir. 2012).

222. *Id.* at 1353.

Defendants moved to sever the cases, arguing that “the claims against them did not arise out of the same transaction or occurrence” as required by Rule 20.²²³ The Eastern District of Texas denied their motions.²²⁴ On appeal, the Federal Circuit vacated the district court’s order and held that “joinder is not appropriate where different products or processes are involved.”²²⁵ In so holding, the Federal Circuit found that “[j]oinder of independent defendants is only appropriate where the accused products or processes are the same in respects relevant to the patent.”²²⁶ The Federal Circuit also held that claims against independent defendants cannot be joined under Rule 20’s transaction-or-occurrence test unless “there is a logical relationship between the separate causes of action.”²²⁷ The Federal Circuit explained that the “logical relationship” exists if defendants “share an aggregate of operative facts” in the allegedly infringing acts.²²⁸ While joinder is always proper when defendants “are alleged to be jointly liable,”²²⁹ in other situations, the Federal Circuit identified several “factual considerations” for determining whether a “logical relationship” is satisfied.²³⁰

Although the *In re EMC* case did not directly address § 299,²³¹ it provides additional guidelines for interpreting the new joinder provisions under the AIA regime.²³² For example, one district court found that “the *In re*

223. *Id.*

224. *Id.*

225. *Id.* at 1359.

226. *Id.*

227. *Id.* at 1358.

228. *Id.*

229. *Id.* at 1356.

230. The Federal Circuit outlined the “factual considerations”:

In addition to finding that the same product or process is involved, to determine whether the joinder test is satisfied, pertinent factual considerations include whether the alleged acts of infringement occurred during the same time period, the existence of some relationship among the defendants, the use of identically sourced components, licensing or technology agreements between the defendants, overlap of the products’ or processes’ development and manufacture, and whether the case involves a claim for lost profits. The district court enjoys considerable discretion in weighing the relevant factors.

Id. at 1359–60.

231. The Federal Circuit noted that because *In re EMC* predated the AIA legislation, the court “need not decide whether the sameness test in the new legislation is identical to the sameness test we adopt here for cases not covered by the new legislation.” *Id.* at 1360 n.4

232. *See, e.g.*, *Swipe Innovations LLC v. Elavon, Inc.*, No. 9:12CV-40 (E.D. Tex. Aug. 14, 2012); *IpVenture, Inc. v. Acer, Inc.*, 879 F. Supp. 2d 426 (D. Del. 2012); *Digittech Image Techs., LLC v. Agfaphoto Holding GmbH*, No. 8:12-cv-1153, 2012 WL 4513805 (C.D. Cal. Oct. 1, 2012).

EMC court's analysis of what constitutes a common transaction or occurrence under Rule 20 is persuasive regarding interpretation of the same language in the AIA.²³³ Another court noted that *In re EMC* "prophesizes the reasoning that the Federal Circuit would likely use in the future to address the new statute."²³⁴ In *IPVenture Inc. v. Acer Inc.*, a post-AIA case, the court applied the *In re EMC* rationale and found that "[t]he fact that [the accused products] generally have the same components and the same functionalities does not mean that they are 'the same in respects relevant to the patent.'"²³⁵ In addition, the court also found that the mere fact that an accused product complied with an industry standard is not sufficient to meet the permissive joinder "sameness" standard, absent a connection between the standard and the alleged infringement.²³⁶

Therefore, § 299, together with the *In re EMC* decision, has succeeded in unifying the joinder standard and largely corrected the abuse of joinder practices in patent cases. Thus far, most patent plaintiffs conform their practices, and the number of multi-defendant suits has declined dramatically.²³⁷

b) Easier for Defendant to Transfer Venue

Another benefit of § 299 is that it severely constrains plaintiffs' ability to lock defendants into an inconvenient venue. Prior to the AIA, the presence of multiple defendants made it difficult to transfer a case to a different venue.²³⁸ Some patent plaintiffs had used this procedural tool in hope of locking unrelated, geographically diverse defendants into a venue friendly to patent plaintiffs and then extracting nuisance settlements.²³⁹

This practice of unfairly locking defendants into inconvenient venues through multiple-defendant suits has received a harsh rebuke from the Federal Circuit. Defendants increasingly sought transfer of venue in the Federal Circuit based on extraordinary writs of mandamus, and the Federal Circuit responded by accepting the writs and ordering the transfer of cases

233. *Swipe Innovations*, No. 9:12CV-40, at 3.

234. *Digitech*, 2012 WL 4513805, at *4.

235. *IPventure*, 879 F. Supp. 2d at 430.

236. *Id.*

237. *See supra* Section III.B.

238. *See Taylor*, *supra* note 19, at 677–78.

239. *See, e.g., Roger Cheng, NTP Sues Apple, Google, Other Smartphone Makers*, WALL ST. J. (July 10, 2010), <http://online.wsj.com/news/articles/SB10001424052748704075604575356830795911148> (commenting on a suit filed by a patent troll against Apple, Google, HTC, LG, Microsoft, and Motorola over patents related to the wireless delivery of email to cellphones).

from the plaintiff's chosen venue to ones a defendant found more convenient.²⁴⁰ For example, in *In re Link_A_Media Devices Corp.*, the Federal Circuit granted the defendant's motion for a writ of mandamus and directed the Delaware court to transfer the case to the Northern District of California.²⁴¹ There, the defendant's only connection to Delaware was that it was incorporated there,²⁴² and the most relevant witnesses and documents were in the Northern District of California.²⁴³ While acknowledging the significance of the plaintiff's choice of forum, the court stated that "when a plaintiff brings its charges in a venue that is not its home forum, however, that choice of forum is entitled to less deference."²⁴⁴ The Federal Circuit also noted that "neither § 1404 nor [relevant case law] list a party's state of incorporation as a factor for a venue inquiry. It is certainly not a dispositive fact in the venue transfer analysis, as the district court in this case seemed to believe."²⁴⁵

However, this transfer-of-venue route through the Federal Circuit is both time-consuming and expensive. Section 299 makes it less likely for a patent plaintiff to lock multiple defendants into a patent plaintiff-friendly venue since a defendant is far more likely to get its choice of transfer in a single defendant suit. Moreover, § 299 limits the discretionary power of patent plaintiffs in choosing a favorable venue, and patent plaintiffs will likely engage in more strategic grouping of targets. For example, a patent plaintiff might file a first round of lawsuits against a few entities in a jurisdiction the plaintiff "perceives as favorable" and where venue will likely stick.²⁴⁶ The patent plaintiff will then bring a second group of actions against a second group of entities in a second jurisdiction that the patentee also "perceives as favorable" and where venue will likely stick, and so on.²⁴⁷ Thus, even if a defendant ends up being "locked up" in plaintiff's original venue, that venue will likely be more convenient than one in a massive pre-AIA multi-defendant case.

Such a benefit to a defendant, however, should be taken with a grain of salt. Courts, in consideration of efficiency and consistent ruling, will likely

240. See, e.g., *In re TS Tech USA Corp.*, 551 F.3d 1315, 1322–23 (Fed. Cir. 2008) (issuing a writ of mandamus compelling the district judge in the Eastern District of Texas to grant a convenience transfer to the Southern District of Ohio).

241. *In re Link_A_Media Devices Corp.*, 662 F.3d 1221, 1223 (Fed. Cir. 2011).

242. *Id.* at 1221.

243. *Id.*

244. *Id.* at 1223.

245. *Id.* at 1224.

246. See BURT, IRWIN & TROP, *supra* note 72, at 15.

247. *Id.*

retain the case through the *Markman* phase of the proceedings even if a transfer of venue order is granted. For example, in *Norman IP Holdings*, after consolidating pretrial proceedings, the Eastern District of Texas ruled that motions to transfer venue, even if granted, will not become effective until after a *Markman* hearing, so as to “conserve judicial resources” and ensure “consistent claim construction.”²⁴⁸ Therefore, for defendants who desire a different venue, transferring without all pretrial matters is at most a limited success. Furthermore, in cases where a defendant succeeds in transferring venue, patent plaintiffs may use MDL to consolidate pretrial proceedings to a single district court. In such a case, defendants may still face inconvenience, as the venue decided by the Panel will not cover the best interest of every defendant.

c) Separate Trial for Defendant to Present Individualized Position

In addition to the choice of venue, § 299 may also afford defendants real benefits from separate trials. Prior to the AIA, multi-defendant cases sometimes proceeded jointly all the way through trial.²⁴⁹ During such joint trials, each defendant’s attorney must argue her case in a portion of the allotted time during oral argument, while the plaintiff enjoys the whole allotted time.²⁵⁰ This puts defendants at a disadvantage because they may not have enough time at trial to present individualized defense theories, and “often the codefendants are unwilling to share confidential information with their competitors, hampering their ability to coordinate trial strategy and present a compelling defense.”²⁵¹

Significantly, § 299 does not permit consolidation for trial unless the “same product or process” and “common transaction” standards are met.²⁵² Accordingly, § 299 ensures that each defendant will get greater opportunity to put on a defense rather than having to divide limited hours among many other defendants, thereby benefiting from individualized positions in separate trials. Moreover, if the first defendant successfully invalidates the

248. *Norman IP Holdings, LLC v. Lexmark Int’l, Inc.*, No. 6:11-CV-495, 2012 WL 3307942, at *4 (E.D. Tex. 2012).

249. See Macedo, Kasdan & Boag, *ALA’s Impact: Part 2*, *supra* note 114 (noting that “it was not uncommon for multidefendant cases to proceed jointly, all the way through trial”).

250. Beth Shaw, *Reform Law Aims To Prevent Abuse Of Joinder In Patent Suits*, 20 WASH. LEGAL FOUND., no. 24, Nov. 4 2011, available at http://wlf.org/publishing/publication_detail.asp?id=2279 (“Joining so many defendants (each making or using a different device or process) means that each defendant will likely have only a matter of hours to make its case Meanwhile, a single plaintiff gets an advantage because it gets the same number of hours to put on its case by itself.”).

251. *Id.*

252. 35 U.S.C. § 299(a) (2012).

asserted patent claims, this may preclude the need for subsequent trials for remaining defendants, saving both defendants' and courts' resources.²⁵³ Further, the prospect of incurring the costs of multiple trials may work to dissuade plaintiffs from engaging in trial. These benefits to defendants, however, remain to be seen as we have not yet seen how the post-AIA serially filed cases will play out.

2. *Section 299 Has Unintended, Negative Consequences*

Although § 299 has achieved some measures of its intended purpose, it also resulted in unintended consequences. Section 299 was passed to curb the growth of NPE patent filings by eliminating the economies of scale they enjoyed with multiple defendants in one suit. However, as both courts and litigants are increasingly using consolidation of pretrial proceedings under Rule 42(a) or MDL,²⁵⁴ such practices make the pretrial stage of patent cases after the passage of the AIA almost unchanged compared to those prior to the AIA's passage. Given that only a small percentage of patent cases actually end up reaching trial, the economic considerations incentivizing trolls to bring lawsuits against multiple defendants are essentially the same.²⁵⁵ Unsurprisingly, § 299 has failed to deter trolls from filing lawsuits. Nor did it decrease the number of defendants involved in troll suits.²⁵⁶ Instead, the absolute number of patent cases is up dramatically, and an even larger percentage of patent cases are filed in the District of Delaware and the Eastern District of Texas, two district courts considered to be patent-holder friendly.²⁵⁷

The following Section discusses the unintended consequences of § 299 that resulted from these changed dynamics of patent filings. It contends that § 299 raises the costs and risks of patent litigation, impairs some defendants' interests in co-defending patent cases, negatively affects practicing entities

253. See Daniel H. Brean & Lee C. Cheng, *Benefits of a Coordinated Joint Defense in Patent Cases*, LAW360 (Nov. 27, 2012, 1:16 PM), <http://www.law360.com/articles/394657/benefits-of-a-coordinated-joint-defense-in-patent-cases>.

254. See *supra* Part III.

255. See Rader, *supra* note 43, at 19 (noting that "far less than 4% of all patent cases reach the trial stage and many of those trials do not employ a jury").

256. See *supra* Section IV.A

257. See CHRIS BARRY, RONEN ARAD, LANDAN ANSELL & EVAN CLARK, PRICEWATERHOUSECOPPERS, 2013 PATENT LITIGATION STUDY: BIG CASES MAKE HEADLINES, WHILE PATENT CASES PROLIFERATE (2013), available at <http://www.pwc.com/us/en/forensic-services/publications/2013-patent-litigation-study.jhtml> (reporting that Delaware and the Eastern District of Texas rank as top districts that are most favorable to patent holders) [hereinafter 2013 STUDY].

seeking to enforce their patent rights, and may lead to inconsistent patent rulings.

a) Raising the Costs and Risks of Patent Litigation

Section 299 has unintentionally increased the costs of patent litigation for both plaintiffs and defendants. Section 299 intends to discourage trolls by forcing them to pay more filing fees.²⁵⁸ However, the \$350 filing fee is unlikely to severely discourage trolls from filing a patent lawsuit, especially when compared with litigation costs or potential settlement damages.²⁵⁹ Indeed, the data discussed above shows filings by trolls have consistently increased since the passage of § 299.²⁶⁰

On the other hand, both patent plaintiffs and defendants need to pay more fees to file motions to sever or consolidate. Given that courts are generally inclined to grant pretrial consolidation, it is possible that parties will simply end up situating themselves in the same pre-AIA posture, except now having expended significant resources litigating over consolidation and joinder issues. For example, in *In re Body Science LLC Patent Litigation*, the defendants were severed from a single action and were denied pretrial consolidation, but eventually centralized under MDL.²⁶¹ The case was previously brought to the Northern District of Illinois, where the court denied pretrial consolidation for discovery or *Markman* hearing purposes, and transferred all actions to different districts.²⁶² The patent holder then sought centralization of the separated actions under MDL, which was opposed by all defendants.²⁶³ Interestingly, unlike the district court, the MDL Panel granted the transfer order, reasoning that centralization promotes efficiency in “discovery relating to the two patents at issue” and ensures consistent ruling “on challenges to the validity of those patents.”²⁶⁴ Although the case was eventually transferred to a district preferred by some defendants, it hardly seems worth the expense and time invested by all parties into the drawn-out process.²⁶⁵

258. The statutory filing fee for a patent infringement suit is \$350. *See* 28 U.S.C. § 1914(a) (2012).

259. 2013 STUDY, *supra* note 257 (reporting that median damages awarded to NPEs averages eight million).

260. *See supra* Section V.I.

261. *In re Body Science LLC Patent Litig.*, 883 F. Supp. 2d 1344, 1345–46 (J.P.M.L. 2012).

262. *Id.* at 1345.

263. *Id.*

264. *Id.*

265. *Id.*

Furthermore, § 299 may add uncertainty to already complicated patent litigation. For example, consolidation under MDL will occur in a jurisdiction determined by the Panel as the most convenient, which may or may not be the choice of any of the involved parties.²⁶⁶ *In re Webvention* provides a good illustration.²⁶⁷ There, the patentee, Webvention, sued several defendants in the Eastern District of Texas.²⁶⁸ A few defendants moved to have the litigation centralized in Delaware.²⁶⁹ Webvention opposed defendants' motion, and suggested the Eastern District of Texas as the transferee forum in case the Panel granted defendant's motion.²⁷⁰ To both parties' surprise, the Panel ordered the cases to be centralized in Maryland—not in Texas or in Delaware.²⁷¹ Considering that it was the defendants who moved for centralization in *In re Webvention*, it is thus likely that the increased uncertainty and risk of patent litigation will not only affect patent plaintiffs, including trolls, but also defendants.

b) Impairing Some Defendants' Interests in Co-Defending a Patent Case

Because § 299 forces plaintiffs to file multiple individual suits instead of a massive multi-defendant suit, § 299 appears to allow different defendants to challenge the validity of the asserted patents multiple times. Moreover, it may decrease litigation cost for defendants because they will have to monitor information and activities associated with other accused infringers in order to minimize potential prejudice. However, these two theoretical advantages could be undercut in practice.

Although a defendant can still challenge the validity of a patent if it was not a party in a prior suit, even if the prior suit validates the patent, defendants still may be troubled with having to overcome earlier claim construction rulings and rulings on invalidity defenses.²⁷² In those situations, defendants in a slower-moving case will need to worry about rulings from faster-moving cases, which may adversely affect them if defendants in the faster-moving case failed to effectively challenge the validity of patent.

266. See BURT, IRWIN & TROP, *supra* note 72, at 19.

267. *In re Webvention LLC* ('294) Patent Litig., 831 F. Supp. 2d 1366 (J.P.M.L. 2011).

268. *Id.*

269. *Id.*

270. *Id.*

271. *Id.* at 1367.

272. See Macedo, Kasdan & Boag, *ALA's Impact: Part 2*, *supra* note 114 (“[I]f prior defendants did an ineffective job on these issues, this could have an adverse impact on later defendants, perhaps even limiting their available defenses.”).

Additionally, although multi-defendant suits do disadvantage defendants in many respects, they nonetheless provide defendants the benefit of being able to cooperate with other co-defendants. In single-defendant lawsuits, each defendant will be required to individually brief issues, participate in discovery, and retain infringement and invalidity experts, which will likely result in higher costs for each individual defendant. Smaller defendants with fewer resources to dedicate to litigation are therefore arguably worse off because they have fewer joint-defense options post-AIA. Indeed, a recent survey by Patent Freedom shows that the use of business method patents in litigation by NPEs is growing most rapidly against smaller companies.²⁷³ And even if they are not sued, many small companies are receiving letters demanding license fees.²⁷⁴ For example, Automated Transaction, an NPE, has been sending letters to banks, credit unions, and ISOs, alleging that their ATMs violate their patents and meanwhile offering licenses for a fee less than what it would cost to defend the case alone.²⁷⁵ Some financial institutions in fear of a lawsuit agreed to pay the fee, which ranged from as low as \$1,000 to as high as \$100,000.²⁷⁶ A few accused infringers, however, decided to face the lawsuit and succeeded in centralizing the actions to Delaware through MDL.²⁷⁷ The lawyer for the defendants described the centralization as “a game-changer because it unites the banks against their common enemy.”²⁷⁸ This comment reflects the concern that although defendants may still coordinate their defenses in multiple single-defendant lawsuits alleging infringement of the same patents, the separate settings may render coordination more difficult than it would have been under the pre-AIA regime.²⁷⁹

273. *Investigations into NPE Litigation involving Business Method Patents*, PATENT FREEDOM (Sept. 4, 2013), available at https://www.patentfreedom.com/wp-content/uploads/2013/09/NPE-Litigations-involving-Business-Method-Patents_Sept-4-2013.pdf.

274. Colleen Chien, *Patent Trolls by the Numbers*, PATENTLY-O (March 14, 2013), <http://www.patentlyo.com/patent/2013/03/chien-patent-trolls.html>.

275. David Morrison, *Latest Round of ATM Lawsuits Has Focus on Patents*, CREDIT UNION TIMES (Feb. 20, 2013), available at <http://www.cutimes.com/2013/02/20/latest-round-of-atm-lawsuits-has-focus-on-patents>.

276. *Id.*

277. *In re Automated Transactions LLC Patent Litigation*, MDL No. 2429, 2013 BL 94279 (J.P.M.L. Apr. 1, 2013).

278. David Morrison, *ATM Patent Troll Loses Key Court Ruling*, CREDIT UNION TIMES, (Apr. 2, 2013), <http://www.cutimes.com/2013/04/02/atm-patent-troll-loses-key-court-ruling>.

279. See Brean & Cheng, *supra* note 253.

c) Interfering with Non-Troll Plaintiffs' Enforcement of Their Patent Rights

Section 299 affects not only trolls, but also practicing entities seeking to enforce their patent rights. According to a 2013 GAO report, practicing entities brought most of the patent infringement lawsuits from 2007 to 2011, and a portion of these suits involve multiple defendants in the same proceeding.²⁸⁰ Although it is unclear how many of these multi-defendant suits properly joined the defendants, it is unlikely that all abused the joinder practice. Absent a pretrial consolidation order, practicing entities who did not abuse the joinder practice may lose the benefit of multi-defendant suit where they can prosecute multiple matters together, present witnesses for deposition only once, and have consolidated hearings on matters including claim construction and summary judgment. Moreover, these entities will find trials more burdensome, since they must now face each defendant separately unless defendants waive their rights under § 299.

Similarly, absent the benefits of multi-defendant suits, individual inventors, universities, and failed start-ups are also arguably worse off. Unlike trolls, these entities do not aggregate and enforce patent as their primary income streams, and are generally linked more directly to invention activities.²⁸¹ Individual inventors are most likely to be negatively impacted due to their limited resources; indeed, it has been reported that the number of parties sued by individuals has decreased from 1,320 in 2010 to 927 in 2012.²⁸² Although the decrease cannot be solely explained by the change in joinder practice, there is a legitimate concern that the increased cost to sue multiple defendants may discourage some individual inventors from filing patent infringement claims, even if they have sufficient ground to do so.

d) Increasing the Likelihood of Inconsistent Rulings

As a result of the proliferation of single-defendant suits, it may become increasingly common that overlapping claim construction issues on the same

280. GAO REPORT, *supra* note 7, at 17–18 (noting that from 2007 to 2011, “operating companies and related entities brought an estimated 68 percent of all lawsuits . . . [T]here were about 1.9 defendants on average for suits filed by operating companies . . . [and about 3 percent of operating companies] sued 10 defendants or more in a single lawsuit”).

281. *See e.g.*, Mark A. Lemley, *Are Universities Patent Trolls?*, 18 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 611, 630 (2008) (“University patent owners aren’t trolls in my view when they contribute previously unknown technology to society, rather than just imposing costs on others by obtaining and asserting legal rights over inventions independently developed by others.”).

282. Cotropia, Kesan & Schwartz, *supra* note 47, at 19.

patent will be pending in different districts, increasing the likelihood of inconsistent rulings. Whether to consolidate *Markman* hearings is highly case-dependant, and courts have great discretion to approach the issue.²⁸³

There are good arguments for promoting consolidated *Markman* hearings. Holding a single *Markman* hearing can potentially save both parties' and court's time and resources by reducing redundancy.²⁸⁴ Moreover, the intrinsic evidence such as the contextual meaning of the claims, the specification and prosecution history, and the extrinsic evidences such as dictionaries, treatises, and encyclopedias should be the same for interpreting claim terms in the same patent.²⁸⁵

Conversely, some defendants may argue that a consolidated *Markman* hearing requires them to divide limited time with other defendants, making them unable to adequately express their unique positions.²⁸⁶ However, although holding separate proceedings offers individual defendants the greatest opportunity to present their individualized claim construction defenses, courts often defer to the claim construction rulings from earlier cases, even where defendants in a later case raise convincing arguments.²⁸⁷

Post AIA, courts have been able to achieve efficiency and consistent rulings through pretrial consolidation for cases involving the same patent, but have also had to contend with more motions related to severance and consolidation.²⁸⁸ However if pretrial consolidation is not available, different courts may have disparate treatment of the same claim construction issues, which may render the disputes more complex and drag out the process.²⁸⁹ As more cases involving a single patent are filed in different courts and only a portion of them are consolidated for pretrial purpose, the risk of inconsistent rulings will likely become a bigger concern under the AIA regime.

These unintended consequences of § 299 suggest that a categorical rule against joinder might not be a good answer, or at least should not be the *only* answer, to address the troll problem. Although § 299 was passed with trolls in mind, there is no language in § 299 directing the consequences solely to

283. See PETER MENELL ET AL., PATENT CASE MANAGEMENT JUDICIAL GUIDE § 5.1.3.8 (2d ed. 2012), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2114398.

284. See *id.*

285. See *id.*

286. See Shaw, *supra* note 250.

287. See MENELL ET AL., *supra* note 283, § 5.1.3.8.

288. See *supra* Section.III.B.

289. See, e.g., American Piledriving Equip., Inc. v. Geoquip, Inc., 637 F.3d 1324, 1326–27 (Fed. Cir. 2011) (affirming some constructions and reversing others in an appeal over seven underlying cases in several different jurisdictions).

trolls.²⁹⁰ Thus, one way to improve § 299 might be to redefine its scope so as to accurately target the typical culprits who utilize abusive joinder practices. Although it is hard to accurately define “patent trolls,” it may be advisable to use a “negative definition” by defining and exempting certain parties, such as inventors and practicing entities, from the joinder provision.²⁹¹ Alternatively, instead of Congress adopting sweeping legislative change, the judiciary may be able to curb abusive patent litigation “in a more flexible and thus just manner,” by making “liberal use” of summary judgment if a patent plaintiff brings a meritless suit, shifting the prevailing party’s costs of litigation to the losing party for “exceptional” cases, and limiting the scope of discovery.²⁹²

The unintended consequences also call for more “communication and coordination” among codefendants to optimally enjoy the benefit of closely coordinated joint-defense arrangements.²⁹³ Unlike a multi-defendant suit where codefendants were listed together on the complaint, now defendants will likely receive a complaint with only one defendant’s name on it. At the very least, defendants should engage at an early stage in the research process to identify other codefendants, communicate with each other, and decide whether to be represented by the same counsel.²⁹⁴

290. See *supra* Section I.C.

291. See Emily H. Chen, *Making Abusers Pay: Detering Patent Litigation by Shifting Attorneys’ Fees*, 28 BERKELEY TECH. L.J. 351, 376 (2013) (“The SHIELD Act of 2013 approaches this challenge in a novel manner: instead of attempting to positively define a ‘patent troll’ or ‘non-practicing entity,’ the Act of 2013 uses a negative definition, describing three protected categories which typically are not ‘patent trolls’ or ‘non-practicing entities’ and are therefore exempt from the attorney-fee-shifting provision.”).

292. See Ryan Davis, *Fed. Cir. Chief Calls for Caution On Patent Troll Bills*, LAW360 (Nov. 4, 2013, 8:35 PM) http://www.law360.com/ip/articles/486028?nl_pk=23623fbf-a0fb-41bf9627a64da1342be8 (noting that Judge Rader cautioned against sweeping legislative change aimed at solving the troll problem). Davis stated that “Judges already have the authority to reduce abusive litigation tactics and can eliminate the need for new laws passed by Congress if they to make better use of those tools,” such as making “‘liberal use’ of their ability to grant summary judgment if a patent plaintiff brings a suit that is not meritorious” or “mak[ing] more use of the provision of patent law that allows them to order litigants that bring . . . baseless cases to pay their opponents’ litigation costs.” *Id.* At the time of this writing, the U.S. Supreme Court is hearing two patent cases, *Octane Fitness LLC v. ICON Health & Fitness, Inc.* and *Highmark Inc. v. Allcare Health Management Systems*, to decide what makes an “exceptional” patent case justifying fee-shifting.

293. See Brean & Cheng, *supra* note 253 (“More preretention communication and coordination between in-house and outside counsel would afford defendants the opportunity to optimally enjoy the advantages and cost savings achieved by closely coordinated joint defense arrangements.”).

294. *Id.*

V. CONCLUSION

More than two years after the enactment of AIA, it appears that § 299 has achieved some of the results Congress sought, but it has also created unintended consequences. On the one hand, § 299 has stemmed the tide of multi-defendant lawsuits, and will likely afford defendants a higher success rate on transfer of venue. The cost and inefficiency that originated from the proliferation of patent filings are being addressed through known case-management tools such as pretrial consolidation, and there might be real benefits to defendants from separate trials. On the other hand, through pretrial consolidation, the economic considerations that encouraged trolls to bring meritless lawsuits remain largely unchanged, and the number of NPE filings has not declined. The patent system is arguably more costly as both parties may have to incur the additional costs of filing motions to sever or consolidate. Moreover, defendants now need to worry about bad claim construction rulings in parallel cases, and sometimes may find it more difficult to coordinate a joint defense when putting up a defense alone is simply not economically justified.

BREAKING BAD PATENTS: THE FORMULA FOR QUICK, INEXPENSIVE RESOLUTION OF PATENT VALIDITY

Jonathan Tamimi[†]

The Leahy-Smith America Invents Act of 2011 (“AIA”) created new procedures to challenge patent validity at the U.S. Patent and Trademark Office (“PTO”).¹ By offering a faster and less expensive alternative to judicial determinations of patent validity, these procedures will improve patent quality and help remedy the innovation-stifling effects of low-quality patents.² The AIA replaced *inter partes* reexamination with *inter partes* review (“IPR”) and created two additional procedures to challenge patent validity: post-grant review (“PGR”) and the transitional program for covered business method review (“CBMR”).³ Moreover, to better reflect its new responsibility of adjudicating patent validity disputes in the trial-like IPR, PGR, and CBMR proceedings,⁴ the AIA renamed the Board of Patent Appeals and Interferences (“BPAI”) the Patent Trial and Appeal Board (“PTAB”).

The AIA was not Congress’s first attempt to create a low-cost alternative to judicial determinations of patent validity. *Ex parte* reexamination was created in 1981 and allows a patent owner or third party to put a patent back into examination in light of new prior art.⁵ In 1999, Congress created the now-defunct *inter partes* reexamination to allow third-party challengers to comment on each of the patent owner’s responses to the PTO during

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1. See Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011).

2. See OBLON SPIVAK, POST GRANT PROCEEDINGS BEFORE THE PATENT TRIAL AND APPEAL BOARD 2–3 (Greg Gardella et al. eds., 1st ed. 2013).

3. See Leahy-Smith America Invents Act §§ 6, 18 (2011).

4. See *id.* § 7. This Note will refer to IPR, PGR, and CBMR collectively as “AIA reviews.”

5. 35 U.S.C. §§ 301–302 (2012). A patent owner can use reexamination to reaffirm patent validity in light of new prior art, while a third party can attempt to invalidate the patent. J. Steven Baughman, *Reexamination Reexaminations: A Fresh Look at the Ex Parte and Inter Partes Mechanisms For Reviewing Issued Patents*, 89 J. PAT & TRADEMARK OFF. SOC’Y 349, 351 (2007).

reexamination—an option not available in *ex parte* reexamination.⁶ These programs, however, were never embraced as true alternatives to litigation.⁷

This Note provides the most recent analysis of key issues petitioners and patent owners face in AIA reviews. It serves as both a useful reference guide for understanding the AIA review provisions, as well as a preliminary analysis of their usage and limitations. Each section is self-contained and, where applicable, provides the most recent PTAB decisions and analyses on how those decisions will affect petitioners and patent holders.

Part I discusses the historical background of the AIA. Part II navigates the AIA's updated and expanded procedures for reexamining patent validity at the PTO. The first section of Part II details the advantages of challenging patent validity via AIA reviews relative to district court litigation. The second section presents the limitations and potential drawbacks of using AIA reviews. The third section discusses additional considerations for potential petitioners. Part III concludes with a brief summary of issues surrounding AIA reviews.

I. BACKGROUND

The AIA updates and expands on the post-grant procedures that Congress created in 1981 to allow petitioners to ask the PTO to review the validity of issued patents. This section reviews the *ex parte* and *inter partes* reexamination predecessors to the post-grant review scheme enacted by the AIA, which are critical background to understanding the AIA regime, as well as the transition.

A. *EX PARTE* AND *INTER PARTES* REEXAMINATION

In 1981, the *ex parte* reexamination process was created to allow patent owners or third parties to request the PTO reexamine the patentability of granted patents.⁸ *Ex parte* reexaminations assess patentability based on prior

6. See Baughman, *supra* note 5, at 351.

7. See Sterne et al., *Reexamination Practice With Concurrent District Court Litigation or Section 337 USITC Investigations*, THE SEDONA CONF. J., Sept. 2011, at 16 (“[A] substantial uncertainty and confusion in reexamination pendency” causes “many leading patent litigation jurisdictions [to side] against the grant of stays.”).

8. See 35 U.S.C. § 303(a); PTO *Ex Parte* Reexamination Rules, 37 C.F.R. § 1.515(a) (2013); U.S. PATENT AND TRADEMARK OFFICE, MANUAL OF PATENT EXAMINING PROCEDURE (“MPEP”) § 2241 (8th ed. 2001) (Rev. 9, Aug. 2012). For further description of the process, see Baughman, *supra* note 6, at 351.

art consisting only of patents and printed publications.⁹ The *ex parte* reexamination process contains drawbacks, however, that limit its use as an alternative to litigation. In addition to limiting challenges to § 102 or § 103 grounds, third-party challengers are not permitted to participate in *ex parte* reexaminations.¹⁰ Once the PTO commences the process, only the patent owner is allowed to participate in the reexamination, similar to an application for a new patent.¹¹ Further, although patent owners are allowed to appeal unfavorable findings of patentability to the BPAI (now the PTAB) and eventually to the Court of Appeals for the Federal Circuit (Federal Circuit), third-party challengers are not allowed to appeal an unfavorable finding.¹² The patent owner, therefore, can drag the process out for years, especially using the full gamut of appeals.

Congress attempted to address the shortcomings of *ex parte* reexaminations by creating the *inter partes* reexamination procedure in 1999.¹³ Although challenges were still limited to § 102 or § 103 grounds using patents or printed publications as prior art, *inter partes* reexamination allowed a third party to comment on every patent owner response.¹⁴ Despite this improvement, during the first five years of *inter partes* reexaminations, a period in which the PTO issued over 900,000 patents, only fifty-three requests for such reexaminations were filed.¹⁵ Additionally, estoppel provisions that prevented raising any ground that could have been raised during the reexamination during subsequent civil litigation deterred potential

9. See Baughman, *supra* note 6, at 352. *Ex parte* reexaminations generally proceed with only the patent holder in communication with the PTO. The only exception is if the patent owner files an Owner's Statement, to which the challenger may reply. *See id.*

10. *See id.* Patent owners enjoy a procedural advantage from exclusive dialog with the examiner once the reexamination has begun. *See id.* This advantage causes many third parties to forego *ex parte* reexamination, which effectively requires the third-party requester to lay out its entire case at the outset, including anticipatory responses to what the patent owner may argue much later in the reexamination. *See id.*

11. *See id.*

12. *See* 35 U.S.C. § 306. This provision directs a patent owner to appeal an adverse decision on patentability to the PTAB under 35 U.S.C. § 134, then to the Federal Circuit under 35 U.S.C. § 141.

13. *See* Baughman, *supra* note 6, at 352; Optional *Inter Partes* Reexamination Procedure Act of 1999, Pub. L. No. 106-113, §§ 4601–08, 113 Stat. 1501A-567 (1999) (codified as amended at 35 U.S.C §§ 311–18).

14. *See* Baughman, *supra* note 6, at 352.

15. *See* H.R. REP. NO. 112-98, pt. 1, at 43 (2011) (citing U.S. PATENT & TRADEMARK OFFICE, REPORT TO CONGRESS ON *INTER PARTES* REEXAMINATION 2 (2004), available at http://www.uspto.gov/web/offices/dcom/olia/reports/reexam_report.htm [hereinafter 2004 PTO *INTER PARTES* REPORT]).

requesters.¹⁶ Further, *inter partes* reexamination was only available for patents filed after November 29, 1999.¹⁷ Lastly, although a third party could appeal reexamination decisions to the BPAI, it could not appeal further to the Federal Circuit until 2002.¹⁸

In 2005, the PTO formed the Central Reexamination Unit (“CRU”), which allowed reexaminations to proceed more quickly.¹⁹ The creation of the CRU led to a dramatic increase in reexamination filings.²⁰ In 2005, the PTO received just around five hundred reexamination requests.²¹ Six years later, in 2011, the number of reexaminations jumped to over 1,100.²² Although the number of filings for reexaminations increased, they were often conducted parallel to district court cases and reexamination never proved to be a true alternative to litigation.²³

B. *INTER PARTES* REVIEW, POST-GRANT REVIEW, AND THE
TRANSITIONAL PROGRAM FOR COVERED BUSINESS METHOD
REVIEW

Despite their concurrent enactment, IPR, PGR, and CBMR originated in distinct ways. IPR and PGR were discussed as early as 2004, the beginning of

16. See Baughman, *supra* note 6, at 352–53 (citing MPEP § 2658). Because *inter partes* reexamination introduced an opportunity for a third party to participate in the reexamination, it also created estoppel provisions that prohibited challenges in subsequent civil litigation on “any ground which the third-party requester raised or could have raised during the *inter partes* reexamination proceedings.” 35 U.S.C. § 315(c) (2006). As will be discussed in Section II.B.4, *infra*, the estoppel provisions for *inter partes* review, the successor to *inter partes* reexamination, kept but softened estoppel in this context by making it apply only to grounds raised or grounds that could have *reasonably* been raised. See 35 U.S.C. §§ 315(e)(1), 325(e)(1).

17. See Baughman, *supra* note 6, at 352.

18. See *id.* at 353. Prior to 2002, third parties could not appeal a BPAI decision to the Federal Circuit. See 35 U.S.C. § 315(b)(1).

19. See Baughman, *supra* note 6, at 351. The PTO stopped assigning reexaminations to examiners based on technology area and instead assigned the reexaminations to the newly created CRU, comprised of examiners trained in the reexamination procedures. See *id.*

20. See REMY YUCEL, CENTRAL REEXAMINATION UNIT AND THE AIA 3 (2012), http://www.uspto.gov/aia_implementation/20120221-road-show-ds-cru.pdf.

21. See *id.*

22. See *id.*

23. See Sterne et al., *supra* note 7 (“[A] substantial uncertainty and confusion in reexamination pendency” causes “many leading patent litigation jurisdictions [to side] against the grant of stays.”).

the renewed push for patent reform in Congress.²⁴ On the other hand, CBMR was first proposed only six months prior to the passage of the AIA.²⁵

The quest for a system that provided a true alternative to judicial determinations of patent validity began in the early 2000s. A series of congressional hearings on patent reform were held between 2001 and 2006.²⁶ The American Intellectual Property Law Association (“AIPLA”) testified during a 2004 hearing that it was too expensive and took too long to effectively challenge patents through litigation.²⁷ The uncertain validity of many patents, combined with the long periods of time to adjudicate validity—often seven to ten years from the grant of the patent—was causing major disruptions to industries affected by those patents.²⁸ In fact, in 2004 the AIPLA introduced a bill for a post-grant review system that was remarkably similar to the one that was eventually enacted by the AIA, but, as explained below, the post-grant review bill took a circuitous route from 2004 to 2011.²⁹

Early congressional bills proposed a broader post-grant review system than what was proposed by the AIPLA in 2004 and what eventually passed in the AIA. The original bills introduced in Congress would have allowed post-grant review of any patent during its lifetime, provided the petitioner was accused of infringement.³⁰ Both the PTO and the high-tech industry backed the broad post-grant review proposal.³¹ At the time, the PTO noted

24. See, e.g., *Patent Quality Improvement: Post-Grant Opposition: Hearing Before the Subcomm. on Courts, the Internet, and Intellectual Prop. of the H. Comm. on the Judiciary*, 108th Cong. 8–13 (2004) [hereinafter *2004 House Hearing*].

25. See Joe Matal, *A Guide to the Legislative History of the America Invents Act: Part II of II*, 21 FED. CIR. B.J. 539, 628–32 (2012).

26. See *id.* at 600. See generally *Perspectives on Patents: Post-Grant Review Procedures and other Litigation Reforms: Hearing Before the Subcomm. on Intellectual Prop. of the S. Comm. on the Judiciary*, 109th Cong. (2006); *Perspective on Patents: Harmonization and Other Matters: Hearing Before the Subcomm. on Intellectual Prop. of the S. Comm. on the Judiciary*, 109th Cong. (2005); *Patent Quality Improvement: Post-Grant Opposition: Hearing Before the Subcomm. on Courts, the Internet, and Intellectual Prop. of the H. Comm. on the Judiciary*, 108th Cong. (2004); *Patent Reexamination and Small Business Innovation: Hearing Before the Subcomm. on Courts, the Internet, and Intellectual Prop. of the H. Comm. on the Judiciary*, 107th Cong. (2002); *Patents: Improving Quality and Curing Defects: Hearing Before the Subcomm. on Courts, the Internet, and Intellectual Prop. of the H. Comm. on the Judiciary*, 107th Cong. (2001).

27. See Matal, *supra* note 25, at 601 (citing *2004 House Hearing*, *supra* note 24, at 29–30 (statement of Michael Kirk, Executive Director, AIPLA)).

28. See *id.* at 601 (citing *2004 House Hearing*, *supra* note 24, at 29 (statement of Michael Kirk, Executive Director, AIPLA)).

29. See *id.* at 601–02.

30. See *id.*

31. See *id.* at 602. High-tech companies generally produce products covered by many patents, even hundreds or thousands of them. Therefore, these companies worried that

that the *inter partes* reexamination procedure was not being heavily utilized, and it favored changes that would make it more advantageous for petitioners to challenge patents at the PTO.³²

The broad post-grant review system was widely criticized, however. Concern about “serial post-grant challenges” and the loss of incentive to challenge supposedly bad patents early in their life helped to derail the early plans.³³ The PTO also reversed course and no longer supported broad post-grant review after implementing the CRU, which resulted in greater use of existing reexamination procedures.³⁴ Eventually, Congress conceded in 2007 by amending the House bill to provide a small post-issuance window to file for post-grant review and limited IPR challenges to § 102 and § 103 based on patents and printed publications.³⁵

In contrast to IPR and PGR, CBMR sprang onto the scene four years later in 2011, six months before the AIA was enacted.³⁶ Congress proposed Section 18 of the AIA, the CBMR provision, to address concerns about the validity of business method patents following the Supreme Court’s *Bilski* decision.³⁷ The 1998 Federal Circuit decision in *State Street Bank & Trust Co. v. Signature Financial Group, Inc.*³⁸ created a flood of business method patent filings at the PTO, many of which were granted and are now believed to be invalid in light of *Bilski*.³⁹

limiting the review of a patent to a small window (one year) after patent issuance would not allow them to identify the patents they would later allegedly infringe. *See id.*

32. *See id.* The PTO stated “none of [the existing] procedures have fully utilized the Office’s ability to review issued patents.” 2004 House Hearing, *supra* note 24, at 5 (statement of James Toupin, General Counsel, USPTO); *see also* 2004 PTO INTER PARTES REPORT, *supra* note 15, at 3–4.

33. *See id.* at 603 (quoting *Patent Reform Act of 2007: Hearing on H.R. 1908 Before the Subcomm. on Courts, the Internet, and Intellectual Prop.*, 110th Cong. 55 (2007) (statement of Gary Griswold, President and Chief IP Counsel, 3M Innovative Properties Co., on behalf of the Coalition for 21st Century Patent Reform)). Without limitations on when a patent could be challenged, patent owners could be subjected to multiple challenges at the PTO throughout the lifetime of the patent. Also, without the incentive to challenge bad patents early, the same problems of uncertainty that sparked the reform would remain. The public and industry would have to live with those bad patents until an entity was accused of infringement and chose to challenge the validity of the patent. *See id.*

34. *See id.*; *see also supra* Section 1.A, discussing the CRU.

35. *See id.* at 604.

36. *See id.* at 628.

37. *See id.* at 627–29. Although *Bilski* rejected a call to ban business method patents, it held that that the business method patent in question was an unpatentable abstract idea, calling into question the validity of many existing business method patents. *Bilski v. Kappos*, 130 S. Ct. 3218 (2010).

38. 149 F.3d 1368 (Fed. Cir. 1998).

39. *See Matal*, *supra* note 25, at 634 n. 609.

CBMR quickly became a contentious portion of the AIA. More members of Congress participated in the debate over Section 18 than any other part of the bill.⁴⁰ Some in Congress labeled Section 18 as a bank bailout.⁴¹ Others noted some of the seemingly ridiculous business method patents that had been issued, including a patent disclosing a method to receive charitable donations over the Internet that had been asserted against the Red Cross.⁴² Despite patent assertion entities (“PAEs”) battling to limit the scope of Section 18,⁴³ Congress refused to shorten the program’s eight-year window and allowed validity challenges on any grounds throughout the lifetime of the patent, provided the petitioner was charged with infringing the patent.⁴⁴

II. AIA REVIEWS

Part II of this Note discusses the specifics of AIA reviews. Section A details the advantages of AIA reviews relative to district court litigation, while Section B discusses their limitations and drawbacks. Section C provides additional information for practitioners considering AIA reviews. As mentioned in the Introduction, each section in Part II is self-contained and provides analyses of the most recent PTAB decisions where applicable.

A. ADVANTAGES RELATIVE TO DISTRICT COURT LITIGATION

Congress intended AIA reviews to provide inexpensive, quick, and effective challenges to patent validity. Thus, the AIA dictates that reviews must be completed within eighteen months from initial filing, significantly restricts discovery relative to district court litigation, and encourages courts to stay proceedings pending AIA reviews. Moreover, many challenger-favorable provisions accompany AIA reviews. These provisions include no presumption of patent validity at the PTO and the broadest reasonable

40. *See id.* at 629.

41. *See id.* at 630. “Representative Waters argued that section 18 would allow banks ‘to steal legally issued and valid patents,’ and asserted that ‘[f]inancial services-related business method patents have saved financial services companies billions of dollars.’” *Id.*

42. *See id.* at 631 (discussing *Ziarno v. Am. Nat’l Red Cross*, 55 F. App’x 553 (Fed. Cir. 2003)). In 1999, Wiltold Ziarno sued the American Red Cross for patent infringement. *Ziarno*, 55 F. App’x at 554. Ziarno alleged that by accepting donations over the Internet, the Red Cross infringed his patent directed at a “method and system for interactive contributions solicitation and donation.” *Id.* A jury found the patent infringed but invalid, and the Federal Circuit upheld the jury’s finding of invalidity on appeal. *Id.*

43. *See Matal*, *supra* note 25, at 629. “Business-method trolls fought a scorched-earth, office-by-office lobbying war with banks and retailers over [Section 18]. Opponents of Section 18 also launched a sophisticated public-relations campaign that included the use of proxies and efforts to create the appearance of ‘grass roots’ opposition to the provision.” *Id.*

44. *See id.* at 627, 631–32.

interpretation claim construction standard. Although the fees to petition and institute an AIA review are in the tens of thousands of dollars, limited discovery and quick resolution make AIA reviews an order of magnitude less expensive than district court determinations of patent validity. And, most importantly, AIA reviews are effective tools to challenge patent validity.

1. *Final Written Decision Within Eighteen Months*

The PTAB must issue a final written decision in AIA reviews within eighteen months of the original filing date, with an available six-month extension for good cause. Once a petition is filed, the patent owner has three months to file its preliminary response.⁴⁵ Next, the PTAB must make an institution decision—whether to grant the review—within three months of receiving the preliminary response.⁴⁶ If the patent owner foregoes a preliminary response, the PTAB must make an institution decision within three months after the preliminary response's filing deadline.⁴⁷ Thus, a maximum of six months can pass from petition filing to an institution decision. Once a review is instituted, the PTAB has twelve months under normal circumstances, and eighteen for a showing of good cause, to reach a final decision.⁴⁸ See Figure 1 for a visual representation.

As of February 13, 2014, the PTAB has reached a final written decision in eight IPR and seven CBMR proceedings, conforming to the prescribed timeline in each. Table 1 shows that the PTAB generally takes the full twelve months allowed by statute to issue a final decision in AIA reviews (eleven of its fifteen final decisions have taken 363 days or more from the date the PTAB instituted the review). Additionally, no review has taken longer than eighteen months from filing.

45. PTO Trial Practice Before the Patent Trial and Appeal Board, 37 C.F.R. § 42.107(b), 42.207(b) (2013).

46. Leahy-Smith America Invents Act §§ 6(a)(314)(b)(1), 6(a)(324)(b)(1).

47. *Id.* §§ 6(a)(314)(c)(1), 6(a)(324)(c)(1).

48. *Id.* §§ 6(a)(316)(a)(11), 6(a)(326)(a)(11).

Table 1: PTAB Length in Time From Filing and Institution Decision to Final Written Decision

Proceeding	Filing Date	Institution Date	Date of Final Decision	Institution to Final Decision Days (Months)	Filing to Final Decision Days (Months)
IPR2012-00001 ⁴⁹	16-Sep-12	9-Jan-13	13-Nov-13	308 (10)	423 (14)
IPR2012-00005 ⁵⁰	16-Sep-12	12-Feb-13	11-Feb-14	364 (12)	513 (17)
IPR2012-00018 ⁵¹	17-Sep-12	12-Feb-13	10-Feb-14	363 (12)	511 (17)
IPR2012-00019 ⁵²	17-Sep-12	12-Feb-13	10-Feb-14	363 (12)	511 (17)
IPR2012-00020 ⁵³	17-Sep-12	12-Feb-13	11-Feb-14	364 (12)	512 (17)
IPR2012-00023 ⁵⁴	17-Sep-12	12-Feb-13	11-Feb-14	364 (12)	512 (17)
IPR2012-00027 ⁵⁵	18-Sep-12	31-Jan-13	7-Jan-14	341 (11)	476 (16)
IPR2013-00010 ⁵⁶	3-Oct-12	12-Feb-13	11-Feb-14	364 (12)	496 (16)
CBM2012-00001 ⁵⁷	16-Sep-12	9-Jan-13	11-Jun-13	153 (5)	268 (9)
CBM2012-00002 ⁵⁸	16-Sep-12	25-Jan-13	23-Jan-14	363 (12)	494 (16)

49. Garmin Int'l Inc. v. Cuozzo Speed Techs. LLC, IPR2012-00001, Paper No. 59 (P.T.A.B. Nov. 13, 2013).

50. Nichia Corp. v. Emcore Corp., IPR2012-00005, Paper No. 68 (P.T.A.B. Feb. 11, 2014).

51. Intellectual Ventures Mgmt., LLC v. Xilinx, Inc., IPR2012-00018, Paper No. 35 (P.T.A.B. Feb 10, 2014).

52. Intellectual Ventures Mgmt., LLC v. Xilinx, Inc., IPR2012-00019, Paper No. 33 (P.T.A.B. Feb 10, 2014).

53. Intellectual Ventures Mgmt., LLC v. Xilinx, Inc., IPR2012-00020, Paper No. 34 (P.T.A.B. Feb 11, 2014).

54. Intellectual Ventures Mgmt., LLC v. Xilinx, Inc., IPR2012-00023, Paper No. 35 (P.T.A.B. Feb 11, 2014).

55. Idle Free Sys., Inc. v. Bergstrom, Inc., IPR2012-00027, Paper No. 66 (P.T.A.B. Jan. 7, 2014).

56. Motorola Mobility LLC v. Arnouse Digital Devices Corp., IPR2013-00010, Paper No. 45 (P.T.A.B. Feb. 11, 2014).

57. SAP Am., Inc. v. Versata Dev. Group, Inc., CBM2012-00001, Paper No. 70 (P.T.A.B. June 11, 2013).

58. Liberty Mut. Ins. Co. v. Progressive Cas. Ins. Co., CBM2012-00002, Paper No. 66 (P.T.A.B. Jan. 23, 2014).

Proceeding	Filing Date	Institution Date	Date of Final Decision	Institution to Final Decision Days (Months)	Filing to Final Decision Days (Months)
CBM2012-00003 ⁵⁹	16-Sep-12	12-Feb-13	11-Feb-14	364 (12)	513 (17)
CBM2012-00004 ⁶⁰	16-Sep-12	25-Jan-13	23-Jan-14	363 (12)	494 (16)
CBM2012-00005 ⁶¹	21-Sep-12	23-Jan-13	21-Jan-14	363 (12)	487 (16)
CBM2012-00007 ⁶²	19-Sep-12	31-Jan-13	30-Jan-14	364 (12)	498 (16)
CBM2013-00009 ⁶³	20-Nov-12	28-Mar-13	11-Feb-14	320 (11)	448 (15)

59. Liberty Mut. Ins. Co. v. Progressive Cas. Ins. Co., CBM2012-00003, Paper No. 78 (P.T.A.B. Feb. 11, 2014).

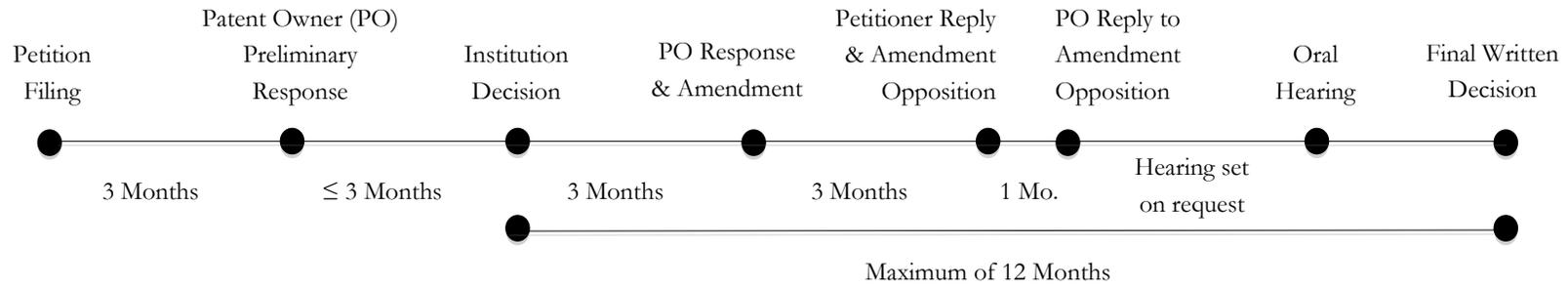
60. Liberty Mut. Ins. Co. v. Progressive Cas. Ins. Co., CBM2012-00004, Paper No. 60 (P.T.A.B. Jan. 23, 2014).

61. CRS Advanced Techs., Inc. v. Frontline Techs., Inc., CBM2012-00005, Paper No. 66 (P.T.A.B. Jan. 21, 2014).

62. Interthinx, Inc. v. CoreLogic Solutions, LLC, CBM2012-00007, Paper No. 58 (P.T.A.B. Jan. 30, 2014).

63. Liberty Mut. Ins. Co. v. Progressive Cas. Ins. Co., CBM2013-00009, Paper No. 68 (P.T.A.B. Feb. 11, 2014).

Figure 1: IPR/PGR/CBMR Timeline



2. *Limited Discovery*

Discovery in AIA reviews is restrained relative to district court litigation.⁶⁴ Limited discovery lowers costs, minimizes complexity, and shortens dispute resolution. The PTAB considers the one-year statutory deadline for completion of AIA reviews when determining what constitutes permissible discovery.⁶⁵ In particular, the IPR “interest of justice” standard for additional discovery is much narrower than the “reasonably calculated to lead to the discovery of admissible evidence” standard employed in civil litigation.⁶⁶

The differences in IPR, PGR, and CBMR resulted in different standards for additional discovery. The AIA limits discovery in IPR to the deposition of witnesses submitting affidavits or declarations, as well as “what is otherwise necessary in the interest of justice.”⁶⁷ Discovery in PGR and CBMR is limited to “evidence directly related to factual assertions advanced by either party in the proceeding.”⁶⁸ The PTO has further promulgated discovery standards that apply to all review proceedings: mandatory initial disclosures, routine discovery, and additional discovery.⁶⁹

Parties can agree to mandatory initial disclosures before the patent owner’s preliminary response is filed.⁷⁰ If the parties agree to mandatory initial disclosures, the Office Patent Trial Practice Guide provides two options. The first option mimics the initial disclosure requirements in civil litigation under the Federal Rules of Civil Procedure (“F.R.C.P.”) Rule 26(a)(1)(A).⁷¹ The second is more extensive, providing directions for

64. See Patrick Doody, *5 Do’s and Don’ts In Post-Grant Proceedings*, LAW360 (Sept. 30, 2013, 12:44 PM), <http://www.law360.com/ip/articles/475346/5-do-s-and-don-ts-in-post-grant-proceedings>.

65. See *Garmin Int’l, Inc. v. Cuozzo Speed Techs. LLC*, IPR2012-00001, Paper No. 26, at *5–6 (P.T.A.B. Mar. 5, 2013).

66. See Alan W. Kowalchuk & John Vaubel, *Post-Grant Proceedings: The Limited Scope of Additional Discovery*, BNA IP (Aug. 16, 2013), <http://about.bloomberglaw.com/practitioner-contributions/post-grant-patent-proceedings-the-limited-scope-of-additional-discovery/>.

67. Leahy-Smith America Invents Act § 6(a)(316)(a)(5) (2011). This section notes that the Director of the PTO will prescribe regulations setting forth the standards and procedures of discovery.

68. *Id.* § 6(d)(326)(a)(5).

69. See 37 C.F.R. § 42.51 (2013).

70. 37 C.F.R. § 42.51(a)(1)(i).

71. See U.S. PAT. & TRADEMARK OFF., PTO-P-2011-0094, OFFICE PATENT TRIAL PRACTICE GUIDE § (F)(4) (2011). This option requires disclosing the names and addresses of those likely to have discoverable information in addition to copies or location descriptions of

petitioners alleging obviousness and details for petitioners claiming “the existence of an alleged prior non-published public disclosure.”⁷² The parties take discovery of the agreed upon information when and if the PTAB institutes a trial.⁷³ If the parties do not reach an agreement, each may seek discovery by motion.⁷⁴

Routine discovery requires any exhibit cited in paper or testimony to be served when citing, allows cross-examination of affidavit testimony, and requires “a party [to] serve relevant information that is inconsistent with a position advanced by the party during the proceeding.”⁷⁵

Parties may move for or agree to engage in additional discovery.⁷⁶ The moving party must show why the discovery is “in the interest of justice” for an IPR, or why the discovery is “directly related to factual assertions advanced [in the proceeding]” for a PGR or CBMR.⁷⁷ As such, additional discovery in AIA reviews differs significantly from discovery in district court.⁷⁸

The PTO’s pre-AIA use of the “interest of justice” discovery standard and recent PTAB decisions shed light on the potential scope of additional discovery in IPR.⁷⁹ The BPAI, referring to the standard, noted that “the more speculative the case, the less likely discovery is to be authorized.”⁸⁰ However, “if a party can reasonably establish that its opponent or some third-party can supply a missing link to make out a prima facie case, then discovery . . . may be appropriate.”⁸¹

More recently, the PTAB addressed the IPR “interest of justice” discovery standard in *Garmin International, Inc. v. Cuoꝑꝑo Speed Technologies*

all documents, electronic information, and tangible things a party may use to support its claims or defenses. *Id.*

72. *Id.*

73. 37 C.F.R. § 42.51(a)(1)(ii).

74. 37 C.F.R. § 42.51(a)(2).

75. 37 C.F.R. § 42.51(b)(1)(iii).

76. 37 C.F.R. § 42.51(b)(2).

77. *Id.*

78. See Bryan P. Collins, *USPTO Trials: Understanding the Discovery Rules*, LAW360 (Sept. 5, 2012, 12:14 PM), <http://www.law360.com/articles/375121/uspto-trials-understanding-the-discovery-rules>.

79. See Vic Souto, *How PTAB Applies “Interests of Justice” Discovery Standard*, LAW360 (Sept. 9, 2013, 12:15 PM), <http://www.law360.com/articles/468183/how-ptab-applies-interests-of-justice-discovery-standard>.

80. *Sernyk v. DeBonte*, 72 U.S.P.Q. 2d 1355, 1361 (B.P.A.I. 2004).

81. *Id.* at 1361.

LLC.⁸² The Board considered five factors relevant to the patent owner's request for additional discovery:

1. The request is based on more than a possibility and mere allegation;
2. The request does not seek litigation positions and underlying basis;
3. The information must be not reasonably available through other means;
4. The request is easily understandable; and
5. The request is not overly burdensome to answer.⁸³

The Board specifically addressed the first factor in *Garmin*, noting that “[t]he party requesting discovery should already be in possession of evidence tending to show beyond speculation that in fact something useful will be uncovered.”⁸⁴ In that case, the PTAB denied the patent owner's request for additional discovery because the patent owner failed to provide sufficient evidence or reasoning for why the discovery was useful.⁸⁵

In *Microsoft Corp. v. Proxyconn, Inc.*, the PTAB similarly denied a party's motion for additional discovery, referencing Congress's intent that the “interest of justice” standard for additional discovery in IPR be “limited to minor discovery and special circumstances.”⁸⁶ The request for additional discovery related to secondary considerations of nonobviousness but failed to demonstrate the relevance of the requested discovery to those considerations.⁸⁷

In *Corning Inc. v. DSM IP Assets B.V.*, the PTAB evaluated three separate requests for additional discovery.⁸⁸ The PTAB granted additional discovery

82. *Garmin Int'l, Inc. v. Cuozzo Speed Techs. LLC*, IPR2012-00001, Paper No. 26 (P.T.A.B. Mar. 5, 2013).

83. *Garmin*, IPR2012-00001, Paper No. 26, at *6–7 (P.T.A.B. Mar. 5, 2013).

84. Souto, *supra* note 79.

85. *Garmin*, IPR2012-00001, Paper No. 26 (P.T.A.B. Mar. 5, 2013).

86. *Microsoft Corp. v. Proxyconn, Inc.*, IPR2012-00026 & IPR2013-00109, Paper No. 32, at *4 (P.T.A.B. Mar. 8, 2013).

87. *Id.* The PTAB denied the patent owner's (Proxyconn's) motion for additionally discovery related to the commercial success of its claimed invention. Proxyconn sought to use this information as a secondary consideration of nonobviousness. However, the PTAB noted the case law was well settled and required a nexus between the claimed invention and the commercial success. Without showing the nexus at the time, Proxyconn was not entitled to additional discovery. *Id.* at *5–6.

88. *Corning Inc. v. DSM IP Assets B.V.*, IPR2013-00043, 44, 45, 46, 47, 48, 49, 50, 52, and 53, Paper No. 36 (P.T.A.B. July 16, 2013).

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of laboratory notebooks containing information relied on in the proceeding, but it denied requests for samples of compositions and “any tests inconsistent” with the petitioner’s positions on the compositions.⁸⁹ As the petitioner’s expert testified to the contents of the notebooks, the PTAB found the information useful under *Garmin*.⁹⁰ However, the remaining discovery requests were denied because it was not clear why the information was needed, and it was speculative whether the additional discovery would be useful.⁹¹

One tactic parties in concurrent litigation can employ is to draw from the knowledge gained from litigation discovery. Parties can use their familiarity with the documents from civil discovery to request specific documents and enhance their chances of obtaining additional discovery.⁹²

Table 2 provides a summary of the discovery limitations in AIA reviews.

89. *Id.* at *4.

90. *Id.* at *4.

91. *Id.* at *5.

92. *See* Doody, *supra* note 64.

Table 2: AIA Review Discovery Limitations

Discovery	<i>Inter Partes</i> Review	Post-Grant Review and Covered Business Method Review
AIA	Discovery limited to “deposition of witnesses submitting affidavits or declarations,” and “what is otherwise necessary in the interest of justice,” ⁹³	Discovery limited to “evidence directly related to factual assertions advanced by either party in the proceeding,” ⁹⁴
PTO	Mandatory Initial Disclosures	
	Parties can agree to mandatory initial disclosures and follow procedures outlined in the Office Patent Trial Practice Guide or, if no agreement is reached, seek discovery by motion ⁹⁵	
	Routine Discovery	
	Requires any exhibit cited in paper or testimony to be served, allows cross-examination of affidavit testimony, and requires “a party [to] serve relevant information that is inconsistent with a position advanced by the party during the proceeding,” ⁹⁶	
	Additional Discovery	
	Party seeking additional discovery must show why it is “in the interest of justice,” ⁹⁷	Discovery must be “directly related to factual assertions advanced . . . in the proceeding,” ⁹⁸
<i>Inter Partes</i> Review “Interests of Justice” Standard		
PTAB	<i>Garmin</i> Factors ⁹⁹	
	<ol style="list-style-type: none"> 1. The request is based on more than a possibility and mere allegation 2. The request does not seek litigation position and underlying basis 3. The information must be not reasonably available through other means 4. The request is easily understandable 5. The request is not overly burdensome to answer 	

93. Leahy-Smith America Invents Act § 6(a)(316)(a)(5) (2011).

94. *Id.* § 6(d)(326)(a)(5).

95. 37 C.F.R. § 42.51(a) (2013).

96. 37 C.F.R. § 42.51(b)(1).

97. 37 C.F.R. § 42.51(b)(2).

98. *Id.*

99. *See* *Garmin Int’l Inc. v. Cuozzo Speed Techs. LLC*, IPR2012-00001, Paper No. 26 (P.T.A.B. Mar. 5, 2013).

3. *Stay of Litigation*

Courts are generally encouraged to stay infringement proceedings pending an AIA review, and, in some cases, they are required to do so. The AIA provides specific guidance to courts considering a stay when the patent is in CBMR. Further, a petitioner's judicial challenge of validity, in a declaratory judgment action, may bar an AIA review or result in an automatic stay depending on when the case was filed in relation to the AIA review petition.

Case management issues arise when courts have to decide whether to stay an infringement proceeding in light of a pending AIA review institution or final decision.¹⁰⁰ Courts have full discretion to stay a proceeding and thus far have analyzed stay requests pending AIA reviews similar to stay requests pending reexaminations.¹⁰¹ The three-part test considers the following factors:

1. Whether discovery is complete and whether a trial date has been set;
2. Whether a stay will simplify the issues in question and trial of the case; and
3. Whether a stay would unduly prejudice or present a clear tactical disadvantage to the nonmoving party.¹⁰²

Additionally, the AIA specifically requires district courts to consider a fourth factor when deciding whether to stay a case pending CBMR:

4. Whether a stay, or the denial thereof, will reduce the burden of litigation on the parties and on the court.¹⁰³

100. See John R. Kenny & Scott I. Forman, *An Update on Stays Pending PTAB Trial Proceedings*, LAW360 (Aug. 15, 2013, 12:02 PM), <http://www.law360.com/articles/460557/an-update-on-stays-pending-ptab-trial-proceedings>.

101. See, e.g., *Regents of the Univ. of Mich. v. St. Jude Med., Inc.*, No. 12-12908, 2013 WL 2393340, at *4 (E.D. Mich. May 31, 2013).

102. See *Universal Elecs., Inc. v. Universal Remote Control, Inc.*, No. SACV 12-00329 AG (JPRx), slip op. at *4 (C.D. Cal. May 2, 2013) (quoting *Aten Int'l Co., Ltd. v. Emine Tech. Co., Ltd.*, No. SACV 09-0843 AG (MLGx), 2010 WL 1462110, at *6 (C.D. Cal. Apr. 12, 2010) (quoting *Telemac Corp. v. Teledigital, Inc.*, 450 F. Supp. 2d 1107, 1111 (N.D. Cal. 2006))).

103. *Leahy-Smith America Invents Act* § 18(b)(1)(D). The AIA allows a party to make an immediate interlocutory appeal of a district court's CBMR stay decision, which the Federal Circuit reviews de novo to ensure consistency. *Id.* § 18(b)(1).

In *Semiconductor Energy Laboratory Co. v. Chimei Innolux Corp.*, the court characterized the first factor, whether discovery is complete and whether a trial date has been set, as whether there is “more work ahead of the parties and the Court than behind.”¹⁰⁴ This definition seems to generally weigh toward a stay, considering that IPR petitions must be filed within one year of being served with a complaint alleging infringement and that the median length of a patent infringement action is two and a half years.¹⁰⁵ However, the *Universal Electronics, Inc. v. Universal Remote Control, Inc.* court found that an early *Markman* hearing weighed against staying a proceeding.¹⁰⁶

In evaluating the second factor, whether a stay will simplify the issues and trial of the case, courts have found multiple reasons for and against a stay. The *Semiconductor Energy Laboratory* court noted that the standard for granting IPR weighs in favor of a stay because it creates a higher likelihood that the issues will be simplified relative to reexaminations.¹⁰⁷ In *Pi-Net International, Inc. v. Focus Business Bank*, the court similarly found that a stay would likely simplify issues because all of the asserted claims were challenged in an instituted IPR, providing a reasonable likelihood that at least one claim was invalid.¹⁰⁸ Additionally, the *Semiconductor Energy Laboratory* court found that the lack of non-patent claims in the case also favored a stay.¹⁰⁹ The *Regents of University of Michigan v. St. Jude Medical, Inc.* court, however, stayed a patent infringement action pending IPR even though the plaintiff asserted non-patent claims because the claims were inseparable.¹¹⁰ Moreover, in *Clouding IP LLC v. Oracle Corp.*, the court noted that an agreement forfeiting the right to amend claims during IPR may weigh against a stay because infringement contentions would not have to be redone.¹¹¹ Additionally, the *Automatic Manufacturing Systems, Inc. v. Primera Technology, Inc.* court denied the

104. *Semiconductor Energy Lab. Co. v. Chimei Innolux Corp.*, No. SACV 12-21-JST (JPRx), 2012 WL 7170593, at *3 (C.D. Cal. Dec. 19, 2012) (quoting *Tierravision, Inc. v. Google, Inc.*, No. 11cv2170 DMS(BGS), 2012 WL 559993, at *2 (S.D. Cal. Feb. 21, 2012)).

105. See Kenny & Forman, *supra* note 100.

106. *Universal Elecs.*, No. SACV 12-00329 AG (JPRx), slip op. at *4, *10–11. Although discovery was not complete, the court had set discovery to occur after claim construction and the case was not in as early of a stage as may be suggested by solely looking at the stage of discovery. Further, the defendant waited almost a year to file for IPR and could have done so before the court construed the claims. *Id.*

107. *Semiconductor Energy Lab.*, 2012 WL 7170593, at *3.

108. *Pi-Net Int'l, Inc. v. Focus Bus. Bank*, No. C-12-4958-PSG, 2013 WL 4475940, at *5 (N.D. Cal. Aug. 16, 2013).

109. *Semiconductor Energy Lab.*, 2012 WL 7170593, at *3–4.

110. *Regents of the Univ. of Mich. v. St. Jude Med., Inc.*, No. 12-12908, 2013 WL 2393340, at *5–6 (E.D. Mich. May 31, 2013).

111. See Transcript of Oral Argument at 82, *Clouding IP, LLC v. Oracle Corp.*, No. 12-642-LPS (D. Del. Jan. 25, 2013) (No. 50).

defendant's stay request before the PTAB had instituted a review, but it stated that a renewed motion could be filed when and if the PTAB instituted a review.¹¹²

Additionally, courts consider the effects of estoppel on defendants. If not all defendants are petitioners in a review, only some will be subject to estoppel provisions. To ease concerns about estoppel effects applying only to petitioners, some non-petitioner defendants have agreed to be bound by the estoppel effects of IPR in order to obtain a stay.¹¹³ Further, some defendants seeking a stay have agreed to be bound by limited estoppel provisions arising out of a petitioner's review, even though the petitioner was not a defendant in that action.¹¹⁴ The *Pi-Net* defendants agreed to be estopped from asserting only the arguments petitioner actually raised during the review, instead of all grounds the petitioner could have raised.¹¹⁵ However, the estoppel extended to the grounds and references actually presented by the petitioner in its request and included grounds for which the PTO declined to institute review.¹¹⁶

Some courts, and the District of Delaware in particular, use a three-part test to assess whether a stay would prejudice or unduly advantage one of the parties. Courts analyze the relationship between the parties, the status of the

112. *See* Automatic Mfg. Sys., Inc. v. Primera Tech. Inc., No. 6:12-cv-1727-Orl-37DAB, 2013 WL 1969247, at *4–6 (M.D. Fla. May 13, 2013). The court stated:

[I]t seems clear that a stay of a patent infringement action is not warranted when based on nothing more than the fact that a petition for *inter partes* review was filed in the USPTO. . . . Th[e] six months [that the petition can wait before the USPTO institutes a review] is a kind of limbo that requires the court and the parties to wait . . . [and] if the [USPTO] chooses not to proceed, then this action will have been left languishing on the Court's docket with no discovery, no positioning of the parties on claim construction, and no dispositive motions.

Id. at *4–5 (citing PETER S. MENELL ET AL., PATENT CASE MANAGEMENT JUDICIAL GUIDE 2–20 (2d ed. 2012)). The Court cannot know if IPR will simplify the issues until the IPR is instituted and the court knows the scope of the review. *Id.*

113. *See, e.g., Semiconductor Energy Lab.*, 2012 WL 7170593, at *4; *AutoAlert, Inc. v. Dominion Dealer Solutions, LLC*, No. SACV 12-1661-JST (JPRx), slip op. at 3–4 (C.D. Cal. May 22, 2013).

114. *See* Abhay A. Watwe, *Litigation Stay with Limited Estoppel Imposed on Non-IPR-Requester Defendants*, AIABLOG.COM (Oct. 17, 2013), <http://www.aiablog.com/post-grant-proceedings/litigation-stay-with-limited-estoppel-imposed-on-non-ipr-requester-defendants/> (discussing limited estoppel granted in *Pi-Net Int'l, Inc. v. Focus Bus. Bank*, No. C-12-4958-PSG, 2013 WL 5513333, at *4 (N.D. Cal. Oct. 3, 2013)).

115. *Pi-Net*, 2013 WL 5513333 at *4.

116. *Id.*

review petition, and the timing of the request for the review and the stay.¹¹⁷ In *TruePosition, Inc. v. Polaris Wireless, Inc.*, the court noted that it is more reluctant to grant a stay if the parties are direct competitors, but the plaintiff's failure to seek an injunction weighed in favor of staying the proceedings.¹¹⁸ Further, although some courts are willing to grant stays after an IPR has been filed in light of the PTO's high rate of instituting reviews, the *TruePosition* court found the motion premature because the PTAB had not made an institution decision.¹¹⁹ With respect to the timing of the petition for IPR and motion to stay the proceedings, the court noted that "[t]he more diligent a party is in seeking *inter partes* [sic] review, the less likely its petition is prejudicial to the non-movant."¹²⁰ Consequently, even though the petitioner filed its IPR request within the one-year statutory window,¹²¹ the court found this factor weighed slightly against staying the proceeding because the petitioner waited to file its petition.¹²²

Other courts have found that the third factor, whether a stay would unduly prejudice or present a clear tactical disadvantage to the nonmoving party, generally favors a stay for the more quickly adjudicated AIA reviews relative to reexaminations.¹²³ The average pendency for an *ex parte* reexamination is over twenty-five months, and *inter partes* reexaminations average over thirty-nine months.¹²⁴ IPR, PGR, or CBMR must be completed within eighteen months from filing, providing certainty and a short time frame.¹²⁵ Additionally, the AIA reviews involve one less step in the appeals process relative to reexaminations.¹²⁶ Reexamination appeals proceed first to the PTAB and then to the Federal Circuit, and estoppel attaches only after the Federal Circuit's decision. On the other hand, AIA reviews start at the PTAB, appeals go straight to the Federal Circuit, and estoppel attaches after the PTAB's final decision.¹²⁷ One court has also held that prejudice only

117. *See Trueposition, Inc. v. Polaris Wireless, Inc.*, C. A. No. 12-646-RGA/MPT, 2013 WL 5701529, at *3–4 (D. Del. Oct. 21, 2013), *report and recommendation adopted*, C. A. No. 12-646-RGA, 2013 WL 6020798 (D. Del. Nov. 12, 2013).

118. *Id.* at *14.

119. *See id.*

120. *Id.* at *13.

121. *See supra* Section II.B.3 discussing the one-year bar for IPR petitions.

122. *Trueposition*, 2013 WL 5701529, at *13–14.

123. *See Kenny & Forman, supra* note 100.

124. *See id.*

125. *See id.*

126. *See id.*

127. *See id.*

concerns parties to the litigation and declined to consider whether nonparties (e.g., licensees) would be affected.¹²⁸

The fourth factor, whether a stay, or the denial thereof, will reduce the burden of litigation on the parties and on the court, reflects the AIA's encouragement for courts to stay proceedings involving patents undergoing a CBMR. The court's decision to stay the proceeding can be appealed immediately.¹²⁹ The Federal Circuit will review CBMR stay decisions *de novo* to ensure consistency and establish precedent.¹³⁰

In general, courts have found this factor to favor a stay.¹³¹ However, the court in *Benefit Funding Systems LLC v. Advance America Cash Advance Centers* declined to stay the proceedings, concluding that it was unsure CBMR would substantially reduce the burden of litigation. The court also noted that it took the defendant over ten months to file for CBMR.¹³²

As in other circumstances, courts have explained that a variety of factors have to be considered when deciding to stay a proceeding.¹³³ The *Universal Electronics* court took into consideration its ability to control its docket "to secure the just, speedy, and inexpensive determination of every action."¹³⁴ The idiosyncratic tendencies of each courtroom, along with the traditional factors, will undoubtedly play a large role in future stay determinations. Table 3 summarizes the key factors and situations courts consider when deciding whether to stay an action pending an AIA review.

128. See *Semiconductor Energy Lab. Co. v. Chimei Innolux Corp.*, No. SACV 12-21-JST (JPRx), 2012 WL 7170593, at *9 (C.D. Cal. Dec. 19, 2012).

129. Leahy-Smith America Invents Act § 18(b)(2) (2011).

130. *Id.*

131. See Kenny & Forman, *supra* note 100; see also *VirtualAgility, Inc. v. Salesforce.com, Inc.*, No. 2:13-cv-00011-JRG, 2014 WL 94371 (E.D. Tex. Jan. 8, 2014).

132. See *id.* (discussing *Benefit Funding Sys. LLC v. Advance Am., Cash Advance Ctrs., Inc.*, No. 12-801-LPS, slip op. at 4 (D. Del. June 28, 2013), and noting that "while staying the litigation would somewhat reduce the burden of litigation on the parties and the Court, in the present posture the Court is not confident the reduction would be substantial").

133. See Robert A. Pollock, *To Stay or Not to Stay During Inter Partes Review*, AIABLOG.COM (Jun. 26, 2013), <http://www.aiablog.com/post-grant-proceedings/to-stay-or-not-to-stay-during-inter-partes-review/>.

134. *Universal Elecs., Inc. v. Universal Remote Control, Inc.*, No. SACV 12-00329 AG (JPRx), at *4 (C.D. Cal. May 2, 2013) (quoting FED. R. CIV. P. 1).

Table 3: What Courts Consider When Deciding to Whether to Stay Litigation Pending an AIA Review

Factor	In Favor of Stay	Weights Against Stay
1. Whether discovery is complete and a trial date has been set	More work ahead of the parties and court than behind ¹³⁵	Early or imminent <i>Markman</i> hearing ¹³⁶
		Discovery well advanced ¹³⁷
2. Whether a stay will simplify the issues in question and trial of the case	All asserted claims challenged ¹³⁸	Non-patent claims in suit ¹³⁹
	Review instituted ¹⁴⁰	
	Estoppel from PTAB final decision ¹⁴¹	Agreement to not amend claims ¹⁴²
	All defendants subject to estoppel ¹⁴³	
3. Whether a stay would unduly prejudice or advantage either party	AIA reviews conducted more quickly relative to reexaminations ¹⁴⁴	
	AIA review appeal process less lengthy compared to reexaminations ¹⁴⁵	
District of Delaware Factors ¹⁴⁶	3a. Parties' Relationship Plaintiff fails to seek injunction ¹⁴⁷	Direct competitors ¹⁴⁸
	3b. Status of petition Review instituted ¹⁴⁹	Institution decision pending ¹⁵⁰
	3c. Timing of stay request and petition for review Diligently filing petition for review and requesting stay ¹⁵¹	Waiting until end of statutory period to petition for review and request stay ¹⁵²
Covered Business Method Review Only		
4. Whether a stay will reduce the burden of litigation ¹⁵³	Strong presumption CBMR will reduce litigation ¹⁵⁴	Untimely delay in filing CBMR petition ¹⁵⁵

135. See *Semiconductor Energy Lab. Co. v. Chimei Innolux Corp.*, No. SACV 12-21-JST (JPRx), 2012 WL 7170593, at *2 (C.D. Cal. Dec. 19, 2012).

136. See *Universal Elecs. Inc. v. Universal Remote Control Inc.*, No. SACV 12-00329 AG (JPRx), slip op. at 4, 10 (C.D. Cal. May 2, 2013); *Order Denying Motions to Stay, Nat'l Oilwell Varco, L.P. v. Omron Oilfield & Marine, Inc.*, A-12-CA-773-SS (W.D. Tex. June 10, 2013), ECF No. 42.

137. See *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, No. 3:11-cv-06391-SI (N.D. Cal. June 11, 2013), ECF No. 198.

138. See *Pi-Net Int'l, Inc. v. Focus Bus. Bank*, No. C-12-4958-PSG, 2013 WL 4475940 (N.D. Cal. Aug. 16, 2013), *aff'd in part*, C-12-4958 PSG, 2013 WL 5513333 (N.D. Cal. Oct. 3, 2013).

139. See *Semiconductor Energy Lab.*, 2012 WL 7170593, at *2.

140. See *Automatic Mfg. Sys. Inc. v. Primera Tech. Inc.*, No. 6:12-cv-1727-Orl-37DAB, 2013 U.S. Dist. LEXIS 67790, at *8–9 (M.D. Fla. May 13, 2013).

141. See *Semiconductor Energy Lab.*, 2012 WL 7170593, at *2.

142. See Transcript of Oral Argument at 82, *Clouding IP LLC v. Oracle Corp.*, No. 12-642-LPS (D. Del. Jan. 25, 2013).

143. See *Pi-Net*, 2013 WL 4475940, at *10.

144. See *Semiconductor Energy Lab.*, 2012 U.S. Dist. LEXIS 186322, at *5.

145. See 35 U.S.C. §§ 319, 329 (2012).

146. See *id.*

147. See *TruePosition, Inc. v. Polaris Wireless, Inc.*, No. CV 12-646-RGA/MPT, 2013 WL 5701529 (D. Del. Oct. 21, 2013), *report and recommendation adopted*, No. CV 12-646-RGA, 2013 WL 6020798 (D. Del. Nov. 12, 2013).

148. See *id.*

149. See *id.*

150. See *id.*

151. See *id.*

152. See *id.*

153. Leahy-Smith America Invents Act § 18(b)(1) (2011).

154. See 157 CONG. REC. S1363–65 (daily ed. Mar. 8, 2011) (statement of Sen. Charles Schumer). According to Senator Charles Schumer (D–NY), the fourth factor “places a very heavy thumb on the scale in favor of a stay,” making it “nearly impossible to imagine a scenario in which a district court would not issue a stay.” See Jonathan R.K. Stroud, *District Courts Grant Post-Institution CBM Stays 100% of Time*, AIABLOG.COM (Nov. 18, 2013), <http://www.aiablog.com/post-grant-proceedings/district-courts-grant-post-institution-cbm-stays-100-of-time/>.

155. See *Benefit Funding Sys. LLC v. Advance Am., Cash Advance Ctrs., Inc.*, No. 12-801-LPS, slip op. at 3–4 (D. Del. June 28, 2013).

Thus far, district courts have granted a majority of defendants' stay requests.¹⁵⁶ Of the 537 IPR and fifty-six CBMR petitions filed by October 8, 2013, eighty-seven percent involve patents in concurrent litigation.¹⁵⁷ In almost half of all IPR-related litigation, the petitioners have requested a stay, and courts have stayed forty-eight of seventy cases.¹⁵⁸ Additionally, as of November 18, 2013, courts have granted fourteen of sixteen requests for CBMR-related stays.¹⁵⁹ The two unsuccessful motions were decided before the PTAB had decided whether to institute a review, but the courts granted the petitioners leave to refile.¹⁶⁰ However, in a situation that seemed unimaginable to lawmakers,¹⁶¹ an Eastern District of Texas court recently refused to stay an infringement proceeding even after the PTAB instituted a CBMR of the patent.¹⁶²

The court in *VirtualAgility, Inc. v. Salesforce.com, Inc.* assessed the four factors specified by the AIA and determined that a stay was not warranted.¹⁶³ The court determined that CBMR would not simplify the case because the defendant was challenging patent validity on broader grounds in district court compared to the CBMR.¹⁶⁴ And, although the case was in an early stage and the CBMR was likely to reduce the burden of litigation, the court found that prejudice to the non-moving party weighed heavily against a stay.¹⁶⁵ The plaintiff, a small, direct competitor of the defendant, faced a potential loss of market share and consumer goodwill and risked loss of its witnesses if the court stayed the case.¹⁶⁶ In response to the court's decision, the *VirtualAgility*

156. See Jonathan R.K. Stroud, *District Courts Continue to Grant Majority of Post-Grant-Related Motions to Stay*, AIABLOG.COM (Oct. 11, 2013), <http://www.aiablog.com/post-grant-proceedings/district-courts-continue-to-grant-majority-of-post-grant-related-motions-to-stay/>.

157. See *id.*

158. See *id.*

159. See Jonathan R.K. Stroud, *District Courts Grant Post-Institution CBM Stays 100% of Time*, AIABLOG.COM (Nov. 18, 2013), <http://www.aiablog.com/post-grant-proceedings/district-courts-grant-post-institution-cbm-stays-100-of-time/>.

160. See *id.*

161. See Elizabeth A. Loughton, *Eastern District of Texas Issues First-Ever CBM-Related Denial of Stay Without Leave to Refile*, AIABLOG.COM (Feb. 3, 2014), <http://www.aiablog.com/post-grant-proceedings/eastern-district-of-texas-issues-first-ever-cbm-related-denial-of-stay-without-leave-to-refile/> (referencing Sen. Charles Schumer's statement that "it is nearly impossible to imagine a scenario in which a district court would not issue a stay" in CBMR-related litigation (citing 157 CONG. REC. S1053 (daily ed. Mar. 1, 2011))).

162. See *id.* (citing *VirtualAgility, Inc. v. Salesforce.com, Inc.*, No. 2:13-cv-00011-JRG, 2014 WL 94371 (E.D. Tex. Jan. 8, 2014)).

163. *VirtualAgility*, No 2:13-cv-00011-JRG, 2014 WL 94371 at *16–17.

164. *Id.* at *7.

165. *Id.* at *10–16.

166. *Id.* at *12–14.

defendants have filed the first immediate interlocutory appeal of a CBMR-related stay decision to the Federal Circuit.¹⁶⁷

If a petitioner has filed a civil challenge of patent validity, that district court litigation may automatically be stayed, or the challenge may prevent a petition for AIA review. If the petitioner files a civil challenge to a patent's validity on the same day as or after an AIA review petition is filed, that civil challenge will be automatically stayed until the PTAB declines to institute a review or reaches a final decision.¹⁶⁸ The stay will be lifted only if the patent owner moves to lift the stay, the patent owner brings an infringement counterclaim or suit against the petitioner, or the petitioner moves to dismiss the civil action.¹⁶⁹ A petitioner's civil challenge filed prior to a petition for an AIA review will bar the review.¹⁷⁰ However, a counterclaim challenging patent validity is not treated as a civil action filed to challenge patent validity under this provision.¹⁷¹

Additionally, PGR has its own, unique statutory stay provision. If a patent owner alleges infringement within three months of the grant of its patent, a preliminary injunction motion cannot be stayed because of a petition for or institution of PGR.¹⁷²

4. *Potential Relief from a Final Judgment*

A PTAB invalidity holding may allow a petitioner relief from a final judgment of infringement and patent validity, even after that judgment has been affirmed by the Federal Circuit. Although the AIA encourages or incentivizes district courts to stay litigation in favor of AIA reviews, the AIA is silent on the effect of a PTO finding of invalidity on litigation that is nearly complete in the district court or has been affirmed on appeal at the Federal Circuit. The case *Versata Software, Inc. v. SAP America, Inc.*¹⁷³ may provide an opportunity to address this issue.

167. See Loughton, *supra* note 161.

168. Leahy-Smith America Invents Act §§ 6(a)(315)(a)(2), 6(d)(325)(a)(2) (2011). However, a counterclaim challenging patent validity does not count as a civil action filed to challenge validity. *Id.* § 6(a)(315)(a)(3).

169. *Id.* §§ 6(a)(315)(a)(2), 6(d)(325)(a)(2).

170. *Id.* §§ 6(a)(315)(a)(1), 6(d)(325)(a)(1).

171. *Id.* §§ 6(a)(315)(a)(3), 6(d)(325)(a)(3).

172. *Id.* § 6(d)(325)(b).

173. *Versata Software, Inc. v. SAP Am., Inc.*, 717 F.3d 1255 (Fed. Cir. 2013); *SAP Am., Inc. v. Versata Dev. Grp., Inc.*, CBM2012-00001 (MPT), Paper No. 70 (P.T.A.B. June 11, 2013). For a summary of the feud between Versata and SAP, see Dennis Crouch, *Working Out the Kinks in Post-Issuance Reviews: Versata v. SAP*, PATENTLY-O (Aug. 9, 2013), <http://www.patentlyo.com/patent/2013/08/working-out-the-kinks-in-post-issuance-reviews-versata-v-sap.html>.

District courts have tools to address the effect of PTO findings of invalidity on patent infringement awards. In *Flexiteek Americas, Inc. v. PlasTEAK, Inc.*, the court granted the defendant's motion for relief from judgment under F.R.C.P. Rules 60(b)(5) and (6), after the PTO's reexamination invalidated a patent that was the basis for an unexecuted judgment and permanent injunction.¹⁷⁴ The court held that it would be "unequitable and unjust to . . . enforce [] an injunction and an unexecuted money judgment predicated on a patent claim found to be invalid and cancelled."¹⁷⁵

Additionally, the Federal Circuit has created a framework in the reexamination context to address conflicting findings of validity in district court and invalidity by the PTO. In *In re Swanson*, the Federal Circuit held that judicial determinations of patent validity do not bar later PTO findings of invalidity because the lower evidentiary standard at the PTO makes the two decisions reconcilable.¹⁷⁶ The Federal Circuit again showed deference to the PTO in the *Translogic Tech* cases, which involved simultaneous appeals to the Federal Circuit from a PTO invalidity finding and a district court holding that the same patent was valid and infringed.¹⁷⁷ The Federal Circuit affirmed the PTO's invalidity finding and, that same day in a non-precedential opinion, avoided conflicting appellate decisions by vacating the district court's judgment and remanding for dismissal.¹⁷⁸ Additionally, in *Standard Havens Products v. Gencor Industries, Inc.*, the Federal Circuit held that an accused patent infringer's motion to stay a permanent injunction and damages

174. *Flexiteek Ams., Inc. v. PlasTEAK, Inc.*, No. 08-60996-CIV-COHN/SELTZER, 2012 WL 5364247, at *3 (S.D. Fla. Oct. 31, 2012).

175. *Id.* (internal citations omitted).

176. *In re Swanson*, 540 F.3d 1368, 1370–71 (Fed. Cir. 2008). Two issues were presented to the Federal Circuit: (1) whether a district court finding of validity precludes a substantial new question of patentability and, therefore, review in an *ex parte* reexamination, and (2) whether the Constitution prevents the PTO from overturning a district court finding of patent validity. The Federal Circuit noted that "[n]ot once in the legislative history [of the reexamination statute] did Congress refer to references or issues addressed in prior civil litigation." *Id.* at 1377. The Federal Circuit concluded that a jury trial finding a patent valid by clear and convincing evidence does not preclude the PTO from finding the same patent invalid under a lower, preponderance of evidence standard. *Id.* Similarly, the ruling created no constitutional separation of powers issues because district courts do not find that patents are valid, but can only find that the challenger did not meet the burden of proof to show the patent invalid. *Id.* at 1378–79. As such, a later finding of invalidity by the PTO does not upset the court's decision because the two decisions are reconcilable. *Id.* at 1379.

177. *In re Translogic Tech., Inc.*, 504 F.3d 1249 (Fed. Cir. 2007); *Translogic Tech., Inc. v. Hitachi, Ltd.*, 250 F. App'x 988 (Fed. Cir. 2007).

178. *In re Translogic Tech., Inc.*, 504 F.3d 1249 (Fed. Cir. 2007); *Translogic Tech., Inc. v. Hitachi, Ltd.*, 250 F. App'x 988 (Fed. Cir. 2007).

proceeding pending the outcome of an *ex parte* reexamination should have been granted.¹⁷⁹ As a finding of invalidity at the PTO affirmed on appeal would end the injunction, and because the damage award was unresolved, the Federal Circuit concluded that the injunction and damages proceedings should have been stayed.¹⁸⁰ However, the Federal Circuit has noted that “an attempt to reopen a final federal court judgment of infringement on the basis of a reexamination finding of invalidity might raise constitutional problems.”¹⁸¹

In *Fresenius USA, Inc. v. Baxter International, Inc.*, the counterpart to *Versata* in the reexamination context, the Federal Circuit vacated a judgment of infringement and validity it had affirmed on appeal after the PTO found the patent invalid in reexamination.¹⁸² The Federal Circuit found that Congress intended reexaminations to take place concurrently with litigation and that a PTO finding of invalidity was binding in concurrent litigation, as long as the case had not been finally decided.¹⁸³ The court concluded that the district court judgment was only final as to appeal because the Federal Circuit could set it aside; in such a case, it would not be considered final and binding.¹⁸⁴ Similarly, the remand after the first appeal did not conclusively end the litigation between the parties and could not be considered final, even though it affirmed the validity finding and damages award.¹⁸⁵ Thus, neither the district court nor the Federal Circuit decision was final, and neither could preclude the PTO’s finding of invalidity from controlling the civil litigation.¹⁸⁶

179. *Standard Havens Prods. v. Gencor Indus. Inc.*, 996 F.2d 1236 (Fed. Cir. 1991) (unpublished opinion).

180. *Id.*

181. *In re Swanson*, 540 F.3d at 1380 n.5.

182. *Fresenius USA, Inc. v. Baxter Int’l, Inc.*, 721 F.3d 1330, 1332 (Fed. Cir. 2013).

183. *Id.* at 1339–40.

184. *Id.* at 1341–45.

185. *Id.* at 1341.

186. *Id.* at 1342. To provide support for its assertions, the court cited *Simmons Co. v. Grier Bros. Co.*, in which the Supreme Court invalidated a patent after the Third Circuit had upheld its validity. See *John Simmons Co. v. Grier Bros. Co.*, 258 U.S. 82 (1922). Similarly, the court cited its *Mendenhall* decision for the proposition that “a decision finding a patent not invalid but remanding for further damages proceedings is not a final judgment.” *Fresenius*, 721 F.3d at 1343 (citing *Mendenhall v. Barber-Greene Co.*, 26 F.3d 1573, 1574 (Fed. Cir. 1994)). It then followed that the *Fresenius* decision was not final and did not preclude the PTO’s finding of invalidity from controlling the civil litigation. *Id.* at 1342–43. SAP petitioned the Federal Circuit to rehear the case en banc, but that petition was denied 6-4. See Ryan Davis, *USPTO’s Power to Nix Verdicts Ripe for Supreme Court*, LAW360 (Nov. 6, 2013, 8:53 PM), http://www.law360.com/ip/articles/486812?nl_pk=52e024ee-ea1f-4a7d-99f1-812452e3a32b&utm_source=newsletter&utm_medium=email&utm_campaign=ip.

Judge Newman criticized the majority in her dissent, stating that by giving effect to the PTO's subsequent determination of invalidity, the decision violated the constitutional plan that other government departments cannot overturn court judgments.¹⁸⁷ Further, Judge Newman attacked the majority's view of finality, noting that under the majority's rule, patent owners can be subjected to protracted litigation and consecutive reexaminations until the patent is finally deemed invalid.¹⁸⁸ Additionally, Judge Newman argued that the majority's finality rule was at odds with every other appellate court in the country.¹⁸⁹

The *Fresenius* decision is significant, as the AIA procedures will create situations where the patent is upheld in court but invalidated at the PTO. It is unlikely that IPR and PGR will have this effect because both require a challenge to be filed relatively early in litigation. However, CBMR does not require defendants to file within one year of being served with a complaint alleging infringement, as is the case in IPR. Savvy patent infringement defendants may wait to test their luck in the district court before filing for CBMR, essentially getting another chance at invalidating a patent.

As previously mentioned, *Versata* will provide an opportunity for the Federal Circuit to determine what weight AIA review invalidity decisions will be given to a finding of validity and infringement affirmed by the Federal Circuit.¹⁹⁰ *Versata* and SAP sold competing software products in the mid-1990s.¹⁹¹ *Versata*'s software enjoyed substantial sales between 1995 and 1998 because it used a patented hierarchical pricing method to help salespeople more quickly quote product prices.¹⁹² SAP incorporated a similar method into its enterprise software package and subsequently destroyed the market for *Versata*'s product.¹⁹³ *Versata* sued SAP for patent infringement in 2007 and was eventually awarded \$345 million in damages and royalties.¹⁹⁴ While SAP's appeal from the jury verdict was pending, SAP petitioned for, and was

The four judges voting to rehear the case en banc stated that the decision "goes a long way toward rendering district courts meaningless in the resolution of patent infringement disputes" and attacked the "inapplicable and antiquated view of finality" underpinning the decision. *Id.*

187. *Fresenius*, 721 F.3d at 1347 (Newman, J., dissenting).

188. *Id.* at 1354.

189. *Id.* at 1355–58.

190. *Versata Software, Inc. v. SAP Am., Inc.*, 717 F.3d 1255 (Fed. Cir. 2013); *SAP Am., Inc. v. Versata Dev. Grp., Inc.*, CBM2012-00001, Paper No. 70 (P.T.A.B. June 11, 2013).

191. *Versata*, 717 F.3d at 1259.

192. *Id.* at 1258–59.

193. *Id.*

194. *Id.* at 1259–60.

granted, a covered business method review of Versata's patent.¹⁹⁵ The Federal Circuit affirmed the jury's award of \$345 million in May of 2013.¹⁹⁶ The very next month, in June 2013, the PTAB issued its first final CBMR decision, holding the claims asserted against SAP—the bases for the \$345 million jury award—unpatentable under 35 U.S.C. § 101.¹⁹⁷

Now, the Federal Circuit will have to address whether a PTAB decision invalidating claims that were the basis of an affirmed infringement judgment can provide the infringer with an affirmative defense and allow relief from that judgment. The Federal Circuit can essentially go in three directions: (1) reverse the PTAB's determination of invalidity and not reach the issue of whether the PTAB's determination can affect the concurrent litigation, (2) affirm the PTAB's determination of invalidity and give it preclusive effect in the concurrent litigation—eliminating a \$345 million award affirmed on appeal, or (3) affirm the PTAB's determination of invalidity and not afford it preclusive effect in the ongoing litigation.

If the Federal Circuit were to opt for the first option, reversing the PTAB's decision and not addressing the interplay that decision could have had with the pending litigation, it will not have to throw away an affirmed \$345 million judgment. The issue would probably come up in another situation, however, as it is unlikely that all of patent infringement litigation will be stayed pending CBMR in the future and that all CBMR will be finalized on appeal before infringement judgments.

If the Federal Circuit decides to affirm the PTAB's invalidity determination and give it effect in the litigation, it could support its decision in at least two ways. The Federal Circuit could follow its approach in *Fresenius* and decide that the district court's judgment was not sufficiently final, nor was the decision to affirm the judgment final because the case was remanded to vacate overly broad language from the permanent injunction.¹⁹⁸ The pitfalls to this approach were articulated in Judge Newman's dissent in *Fresenius*. First, it risks a constitutional challenge, as it allows an agency determination to overrule a decision of the courts. Second, a decision based on the finality of the litigation could be attacked. Overturning an award of \$345 million because the district court granted an overly broad injunction does not seem equitable. What would have happened had the district court issued an injunction the Federal Circuit thought was proper? Or what if

195. *Id.* at 1260.

196. *Id.* at 1255, 1269.

197. *SAP Am.*, CBM2012-00001, Paper No. 70, at *2 (P.T.A.B. June 11, 2013).

198. *See* *Fresenius USA, Inc. v. Baxter Intern., Inc.*, 721 F.3d 1330, 1339 (Fed. Cir. 2013).

Versata had simply not asked for a permanent injunction? Would that have made the judgment sufficiently final to escape a redetermination of liability? The Federal Circuit could also follow the approach in *Flexiteek* and order the district court to consider granting relief from judgment under F.R.C.P. Rules 60(b)(5) and (6).¹⁹⁹ This approach is favorable because it avoids the issue of finality, but it is still susceptible to the attack that it violates constitutional principles.

Finally, the Federal Circuit may affirm the PTAB decision without giving it effect in the concurrent litigation. At first glance, this may appear to be directly contrary to Congress's intent in enacting PGR procedures and CBMR in particular. However, statements from the Congressional Record show that Congress may not have intended a PTAB decision to overturn a final court judgment.

The interplay between CBMR and concurrent litigation was discussed multiple times during the passage of the AIA. On March 8, 2011, Senator Leahy was asked what effect Section 18 (CBMR) would have on a case where the patent was held valid in district court and that decision was pending on review.²⁰⁰ Senator Leahy responded that “[t]he patent may still be subject to the proceeding, but since the court did not hold the patent invalid or unenforceable, it would not likely have an effect on the pending appeal.”²⁰¹ On September 8, 2011, Senator Leahy again addressed Section 18 review and concurrent litigation.²⁰² Senator Leahy stated “[w]hile a prior district court decision upholding the validity of a patent may not preclude the PTO from considering the same issues resolved in that proceeding, PTO officials must still consider the court's decision and deviate from its findings only to the extent reasonable.”²⁰³ Further, “the PTO would not initiate proceedings where the petition does not raise a substantial new question of patentability than those that had already been considered by the PTO in earlier proceedings.”²⁰⁴ Some commentators have dismissed Senator Leahy's comments, noting that Senator Leahy appears to have confused the standard for instituting an *ex parte* reexamination with that of a CBMR.²⁰⁵ However, Senator Leahy referred to the standard for instituting a CBMR in the very

199. *Flexiteek Ams., Inc. v. PlasTEAK, Inc.*, No. 08-60996-CIV-COHN/SELTZER, 2012 WL 5364247, at *4 (S.D. Fla. Oct. 31, 2012).

200. 157 CONG. REC. S1360–02 (daily ed. Mar. 8, 2011) (statement of Sen. Patrick Leahy).

201. *Id.*

202. 157 CONG. REC. S5402–02 (daily ed. Sept. 8, 2011), at *66.

203. *Id.*

204. *Id.* at *67.

205. See Matal, *supra* note 25, at 639.

same passage as a safeguard preventing harassment of patent owner's through post-grant proceedings.²⁰⁶

In any case, it is important to recognize that the AIA directly addresses the effect of a CBMR on concurrent district court litigation. Congress expected the balancing test for a district court considering a stay to weigh heavily in favor of a stay because the outcome of a post-grant review would control that district court litigation.

Whichever route the Federal Circuit takes in *Versata* will greatly affect strategy regarding AIA review procedures, specifically CBMR. If a PTAB finding of invalidity has the power to knock out an affirmed district court validity finding and damages award, the AIA reviews will become an even more powerful tool for accused patent infringers. If a PTAB finding of invalidity is held to have no effect on an affirmed award, potential petitioners will have greater incentive to file AIA reviews earlier, and this ruling would seem consistent with congressional goals for AIA reviews.

5. *Favorable Evidentiary and Claim Construction Standards*

The petitioner in an IPR, PGR, or CBMR must prove patent invalidity by a preponderance of the evidence.²⁰⁷ As no presumption of validity accompanies a patent during an AIA review, petitioners do not have to prove invalidity by the higher clear and convincing evidence standard required in district court litigation.²⁰⁸ A somewhat related consideration that helps petitioners is avoiding juries who tend to have a higher degree of respect for patents compared to the administrative patent judges comprising the PTAB.²⁰⁹

Claim construction in an AIA review differs from district court litigation as well. Claims undergoing an IPR, PGR, or CBMR will be given their "broadest reasonable construction in light of the [patent's] specification . . ." ²¹⁰ Although the AIA does not provide guidance on how the PTAB should interpret patent claims, PTO regulations specify the "broadest reasonable construction" standard for claim construction.²¹¹

206. See 157 CONG. REC. S5402-02 (daily ed. Sept. 8, 2011), at *67.

207. Leahy-Smith America Invents Act §§ 6(a)(319), 6(d)(326)(e) (2011).

208. See Wab Kadaba & Mitch Stockwell, *Inter Partes Review: The Good, The Bad And The Ugly*, LAW360 (Apr. 9, 2012, 1:22 PM), <http://www.law360.com/articles/324265/inter-partes-review-the-good-the-bad-and-the-ugly>.

209. See Matthew Cutler, *Why Inter Partes and Post-Grant Reviews Are Game-Changers*, LAW360 (Jan. 8, 2013, 12:14 PM), <http://www.law360.com/articles/402322/why-inter-partes-and-post-grant-review-are-game-changers>.

210. See 37 C.F.R. §§ 42.100(b), 42.200(b) (2013).

211. See *id.*

The “broadest reasonable construction” (“BRC”) standard for claim construction provides procedural advantages for petitioners.²¹² Instead of the traditional *Markman*-based claim construction principles employed by district courts, the BRC standard allows a petitioner to use a wider array of prior art to invalidate the patent.²¹³ Further, although the PTAB’s construction is not binding on the district court, it can provide courts guidance on what should be the broadest interpretation during *Markman* hearings and may lead to early resolution of cases.²¹⁴ This door swings both ways, however, and claim construction from district courts can be used in AIA proceedings.

Additionally, both patent owners and petitioners can submit constructions from the district court to the PTAB. Although “not determinative” of the broadest reasonable construction, the PTAB has allowed a patent owner to submit the district court’s claim construction because it may provide “useful insight and information.”²¹⁵ Petitioners can take advantage of the PTAB’s willingness to allow district court claim constructions as well. 35 U.S.C. § 301(a)(2) provides that anyone may cite to the PTO “statements of the patent owner filed in a proceeding before a Federal court or the Office in which the patent owner took a position on the scope of any claim of a particular patent.”²¹⁶ Congress adopted this provision to “allow the office to identify inconsistent statements made about claim scope” and to counteract patent owners offering different interpretations of prior art in different proceedings.²¹⁷ This could happen when a patent owner argues for a broad interpretation in a district court to help with infringement contentions but subsequently argues for a narrow interpretation to avoid prior art in front of the PTO.²¹⁸

212. See Andrew J. Lagatta & George C. Lewis, *How Inter Partes Review Became A Valuable Tool So Quickly*, LAW360 (Aug. 16, 2013 12:01 PM), <http://www.law360.com/articles/463372/how-inter-partes-review-became-a-valuable-tool-so-quickly>.

213. See Robert M. Abrahamsen, *A Little-Known Tool to Keep Patent Holders Honest*, LAW360 (Oct. 9, 2013, 5:06 PM), <http://www.law360.com/ip/articles/472305/a-little-known-tool-to-keep-patent-holders-honest>.

214. See Lagatta, *supra* note 212.

215. See Andrew R. Sommer, *PTAB Trial Practice Updates*, WINSTON & STRAWN, at 14 (Oct. 2013), available at http://interact.winston.com/reaction/PTAB/Oct17/PTAB_Decision_Sept30_October7.pdf (quoting *Kyocera Corp. v. Softview LLC*, IPR2013-00004, Paper No. 32 (P.T.A.B. Oct. 8, 2013)).

216. 35 U.S.C. § 301(a)(2) (2011).

217. See Shaton C. Menzie, *Patent Owners Beware: Federal Court Arguments for Broad Claim Construction May Be Used Against You in Post Grant Proceedings*, AIABLOG.COM (Oct. 25, 2013), <http://www.aiablog.com/post-grant-proceedings/patent-owners-beware-federal-court-arguments-for-broad-claim-construction-may-be-used-against-you-in-post-grant-proceedings/> (quoting Matal, *supra* note 25, at 594).

218. See *id.*

6. *Less Expensive*

Although the fees to file an AIA review are not small by any means, as demonstrated in the table below, the effects of limited discovery, possibility of stayed litigation, and twelve-month institution to final decision timeframe make AIA reviews much less expensive than district court litigation. The expected cost of a completed IPR is between \$300,000 and \$800,000, an order of magnitude less expensive than a judicial determination of patent validity.²¹⁹

The AIA delegates fee-setting authority to the PTO.²²⁰ The PTO has structured fees in a two-tiered system.²²¹ An initial fee must be paid for the PTO to review the petition.²²² The initial fee consists of a flat fee and a surcharge for every claim in excess of twenty the petitioner wishes the PTO to review.²²³ The second fee is more expensive and comes after institution.²²⁴ This is also structured as a flat fee for institution, with a surcharge for every claim in excess of fifteen that the PTO decides to review.²²⁵ See Table 4 for a summary of AIA review fees.

219. See Lagatta & Lewis, *supra* note 212.

220. Leahy-Smith America Invents Act §§ 6(a)(311)(a), 6(a)(321)(a) (2011).

221. See 37 C.F.R. § 42.15 (2013).

222. *Id.* § 42.51(a)(1), (b)(1).

223. *Id.* §§ 42.51(a)(1), (a)(3), (b)(1), (b)(3).

224. *Id.* § 42.51(a)(2), (b)(2).

225. *Id.* §42.51(a)(4), (b)(4).

Table 4: PTO Fees for AIA Reviews

PTO Fees ²²⁶	<i>Inter Partes</i> Review	Post-Grant Review and Covered Business Method Review
Request Fee		
Flat Fee	\$9,000	\$12,000
Per Claim in Excess of 20	\$200	\$250
Institution Fee		
Flat Fee	\$14,000	\$18,000
Per Claim in Excess of 15	\$400	\$550

7. Effectiveness

Thus far, AIA reviews have been extremely effective at invalidating patents. As seen in Table 5, the PTAB has invalidated every claim that has gone to a final decision. Note that although it appears CBM2013-00003 left three claims valid, those very same claims were subsequently challenged in CBM2013-00009 and found to be invalid.²²⁷ Additionally, in both IPR2012-00020 and IPR2012-00027, the patent owner conceded that some of the patent claims were invalid while the PTAB invalidated the remaining challenged claims.²²⁸ In general, obviousness dominates the PTAB's invalidity findings while § 101 challenges for "unpatentable abstract ideas" that "do not provide enough significant meaningful limitations to transform these abstract ideas into patent-eligible applications of these abstractions" have been most successful in CBMR.²²⁹

226. *Id.* § 42.15.

227. *See* Liberty Mut. Ins. Co. v. Progressive Cas. Ins. Co., CBM2012-00003, Paper No. 78 (P.T.A.B. Feb. 11, 2014); Liberty Mut. Ins. Co. v. Progressive Cas. Ins. Co., CBM2013-00009, Paper No. 68 (P.T.A.B. Feb. 11, 2014).

228. *See* Intellectual Ventures Mgmt., LLC v. Xilinx, Inc., IPR2012-00020, Paper No. 34 (P.T.A.B. Feb. 11, 2014); Idle Free Sys., Inc. v. Bergstrom, Inc., IPR2012-00027, Paper No. 66 (P.T.A.B. Jan. 7, 2014).

229. *See* SAP Am., Inc. v. Versata Dev. Group, Inc., CBM2012-00001, Paper No. 70, at *34 (P.T.A.B. June 11, 2013).

Table 5: PTAB Final Decisions as of February 13, 2014

Proceeding	Patent No.	Petitioner	Patent Owner	Claims Reviewed	Claims Cancelled	Grounds
IPR2012-00001 ²⁰⁹	6,778,074	Garmin Int'l	Cuozzo Speed Techs.	3	3	§ 103
IPR2012-00005 ²¹⁰	6,653,215	Nichia Corp.	Emcore Corp.	17	17	§ 103
IPR2012-00018 ²¹¹	7,566,960	Intellectual Ventures	Xilinx, Inc.	13	13	§ 103
IPR2012-00019 ²¹²	8,062,968	Intellectual Ventures	Xilinx, Inc.	15	15	§ 102, 103
IPR2012-00020 ²¹³	8,058,897	Intellectual Ventures	Xilinx, Inc.	12	12	§ 103
IPR2012-00023 ²¹⁴	7,994,609	Intellectual Ventures	Xilinx, Inc.	19	19	§ 103
IPR2012-00027 ²¹⁵	7,591,303	Idle Free Sys.	Bergstrom, Inc.	23	23	§ 102, 103
IPR2013-00010 ²¹⁶	7,516,484	Motorola Mobility	Arnouse Digital Devices	7	7	§ 102
CBM2012-00001 ²¹⁷	6,553,350	SAP Am., Inc.	Versata Software, Inc.	5	5	§ 101
CBM2012-00002 ²¹⁸	6,064,970	Liberty Mut. Ins. Co.	Progressive Cas. Ins. Co.	16	16	§ 103
CBM2012-00003 ²¹⁹	8,140,358	Liberty Mut. Ins. Co.	Progressive Cas. Ins. Co.	20	17	§ 103

209. Garmin Int'l Inc. v. Cuozzo Speed Techs. LLC, IPR2012-00001, Paper No. 59 (P.T.A.B. Nov. 13, 2013).

210. Nichia Corp. v. Emcore Corp., IPR2012-00005, Paper No. 68 (P.T.A.B. Feb. 11, 2014).

211. Intellectual Ventures Mgmt., LLC v. Xilinx, Inc., IPR2012-00018, Paper No. 35 (P.T.A.B. Feb 10, 2014).

212. Intellectual Ventures Mgmt., LLC v. Xilinx, Inc., IPR2012-00019, Paper No. 33 (P.T.A.B. Feb 10, 2014).

213. Intellectual Ventures Mgmt., LLC v. Xilinx, Inc., IPR2012-00020, Paper No. 34 (P.T.A.B. Feb 11, 2014).

214. Intellectual Ventures Mgmt., LLC v. Xilinx, Inc., IPR2012-00023, Paper No. 35 (P.T.A.B. Feb 11, 2014).

215. Idle Free Sys., Inc. v. Bergstrom, Inc., IPR2012-00027, Paper No. 66 (P.T.A.B. Jan. 7, 2014).

216. Motorola Mobility LLC v. Arnouse Digital Devices Corp., IPR2013-00010, Paper No. 45 (P.T.A.B. Feb. 11, 2014).

217. SAP Am., Inc. v. Versata Dev. Group, Inc., CBM2012-00001, Paper No. 70 (P.T.A.B. June 11, 2013).

218. Liberty Mut. Ins. Co. v. Progressive Cas. Ins. Co., CBM2012-00002, Paper No. 66 (P.T.A.B. Jan. 23, 2014).

219. Liberty Mut. Ins. Co. v. Progressive Cas. Ins. Co., CBM2012-00003, Paper No. 78 (P.T.A.B. Feb. 11, 2014).

Proceeding	Patent No.	Petitioner	Patent Owner	Claims Reviewed	Claims Cancelled	Grounds
CBM2012-00004 ²²⁰	6,064,970	Liberty Mut. Ins. Co.	Progressive Cas. Ins. Co.	17	17	§ 103
CBM2012-00005 ²²¹	6,675,151	CRS Advanced Tech.	Frontline Techs., Inc.	6	6	§ 101
CBM2012-00007 ²²²	5,361,201	Interthinx, INC.	CoreLogic Solutions	4	4	§ 101
CBM2013-00009 ²²³	8,140,358	Liberty Mut. Ins. Co.	Progressive Cas. Ins. Co.	20	20	§ 103

220. Liberty Mut. Ins. Co. v. Progressive Cas. Ins. Co., CBM2012-00004, Paper No. 60 (P.T.A.B. Jan. 23, 2014).

221. CRS Advanced Techs., Inc. v. Frontline Techs., Inc., CBM2012-00005, Paper No. 66 (P.T.A.B. Jan. 21, 2014).

222. Interthinx, Inc. v. CoreLogic Solutions, LLC, CBM2012-00007, Paper No. 58 (P.T.A.B. Jan. 30, 2014).

223. Liberty Mut. Ins. Co. v. Progressive Cas. Ins. Co., CBM2013-00009, Paper No. 68 (P.T.A.B. Feb. 11, 2014).

B. LIMITATIONS

Although the AIA review procedures provide an effective method for challenging patent validity, the limitations and drawbacks of IPR, PGR, and CBMR must be considered to determine if the challenge is available and if it would be wise to pursue review. PGR and CBMR are limited to certain classes of patents, while IPR significantly restricts the grounds available to challenge patents. Each has its own unique procedural restrictions on filing petitions, and the estoppel provisions from a final decision can limit available defenses in a later proceeding in front of the PTO, International Trade Commission (“ITC”), or district court. Additionally, petitioners must present sufficient evidence of invalidity in their petitions before the PTAB will decide to institute a review.

1. *Patents Eligible for Review*

IPR, PGR, and CBMR are applicable to distinct, and sometimes overlapping, types of patents. All patents are eligible for IPR.²²⁴ PGR challenges to patent validity are available only for patents issued under the first-to-file system—that is, patents with effective filing dates on or after March 16, 2013.²²⁵ CBMR, as the name implies, is limited solely to covered business method patents.²²⁶

The AIA does not clearly spell out what qualifies as a business method patent, and it tasks the PTO with determining the scope of patents eligible for CBMR.²²⁷ The AIA defines covered business method patents as “a method or corresponding apparatus for performing data processing or other operations used in the practice, administration, or management of a financial product or service,” not including “technological invention[s].”²²⁸ The PTO determines whether a patent is a “technological invention.”²²⁹

The PTO has guidelines to determine if a patent claims a “technological invention” in the context of CBMR.²³⁰ This case-by-case determination will be made by assessing “whether the claimed subject matter as a whole recites a technological feature that is novel and unobvious . . . and solves a technical problem using a technical solution.”²³¹

224. Leahy-Smith America Invents Act § 6(a)(319)(c)(2)(A) (2011).

225. *See id.* § 6(d)(329)(f)(2)(A).

226. *See id.* § 18(a)(1)(E).

227. *See id.* § 18(d).

228. *Id.* § 18(d)(1).

229. *Id.* § 18(d)(2).

230. *See* 37 C.F.R. § 42.301(b) (2013).

231. *Id.*

Congress appears to have intended the PTO to take an expansive view of what qualifies as a covered business method patent.²³² The legislative history of the AIA indicates that CBMR should not be limited to PTO Class 705 patents, the patent class most commonly associated with business methods.²³³ Indeed, the PTO has indicated some patents outside Class 705 will be eligible for CBMR, stating “[i]t is anticipated that the number of patents in Class 705 that do not qualify as covered business method patents would approximate the number of patents classified in other classes that do qualify.”²³⁴

The PTAB’s CBMR institution decisions have provided further guidance on which patents qualify for review. In *Versata*, the PTAB’s first CBMR institution decision, the PTAB signaled that it would allow challenges to “patents claiming activities that are financial in nature, incidental to a financial activity, or complementary to a financial activity.”²³⁵ And, although the majority of CBMR challenges thus far involve patents that belong to Class 705,²³⁶ the PTAB has instituted reviews for patents outside of Class 705.²³⁷

Patents claiming an electronic sale or the electronic transfer of money may qualify for CBMR, even if they fall outside Class 705. In a series of challenges by Apple against a number of patents owned by SightSound Technologies, the PTAB instituted reviews on patents examined in Class 369

232. See Jonathan R.K. Stroud & Linda J. Thayer, *Just What is “Covered” Under a Covered Business Method Post-Grant Review*, AIABLOG.COM (May 28, 2013), <http://www.aiablog.com/post-grant-proceedings/just-what-is-covered-under-a-covered-business-method-post-grant-review/> (citing 157 CONG. REC. S1363–65 (daily ed. Mar. 8, 2011) (statement of Sen. Charles Schumer)).

233. See *id.* The PTO defines Class 705 to include:

[A]pparatus and corresponding methods for performing data processing operations, in which there is a significant change in the data or for performing calculation operations wherein the apparatus or method is uniquely designed for or utilized in the practice, administration, or management of an enterprise, or in the processing of financial data.

USPTO Info. Prod. Div., *Class 705: Data Processing: Financial, Business Practice, Management, or Cost/Price Determination*, MANUAL OF CLASSIFICATION, <http://www.uspto.gov/web/offices/ac/ido/oeip/taf/def/705.htm> (last modified Oct. 6, 2000). Further, the class includes “apparatus and corresponding methods for performing data processing or calculating operations in which a charge for goods or services is determined.” *Id.* Much of this language is included in the AIA to define which patents are eligible for CBMR. See Leahy-Smith America Invents Act § 18(d)(1) (2011).

234. 77 Fed. Reg. 48,739.

235. SAP Am., Inc. v. Versata Dev. Grp., Inc., CBM2012-00001, Paper No. 36 at *21-22 (P.T.A.B. Jan. 9, 2013).

236. See Stroud et al., *supra* note 232.

237. See Sommer, *supra* note 215, at 16.

(dynamic information storage and retrieval).²³⁸ The PTAB held that a patent directed to “the electronic sales and distribution of digital audio or video signals” was financial in nature and eligible for CBMR because “[t]he electronic transfer of money is a financial activity, and allowing such a transfer amounts to providing a financial service.”²³⁹ In a related proceeding, the PTAB similarly held that “[t]he electronic sale of something, including charging a fee to a party’s account, is a financial activity, and allowing such a sale amounts to providing a financial service.”²⁴⁰ The board went on to reject the patent owner’s arguments that “only patents with a ‘clear nexus to the financial business’ are eligible for a covered business method review” and that a “patent need not be used by a financial services company or involve a traditional financial services business to qualify as a covered business method patent.”²⁴¹

Additionally, in *Liberty Mutual Insurance Co., v. Progressive Casualty Insurance Co.*, the PTAB expanded the purview of CBMR even further by holding that if “at least one claim . . . is directed to a covered business method,” the patent is a covered business method patent, and all of its claims are subject to CBMR.²⁴² The Board rejected Progressive’s arguments that only claims directed to covered business methods are eligible for CBMR, by noting that Congress had, in defining covered business method patents, referred multiple times to patents and not individual claims.²⁴³

Table 6 below summarizes the types of patents eligible for CBMR.

238. See *Apple Inc. v. SightSound Techs., LLC*, CBM2013-00019, Paper No. 17 (P.T.A.B. Oct. 8, 2013); *Apple Inc. v. SightSound Techs., LLC*, CBM2013-00020, Paper No. 14 (P.T.A.B. Oct. 8, 2013); *Apple Inc. v. SightSound Techs., LLC*, CBM2013-00021, Paper No. 13 (P.T.A.B. Oct. 8, 2013); *Apple Inc. v. SightSound Techs., LLC*, CBM2013-00023, Paper No. 12 (P.T.A.B. Oct. 8, 2013).

239. *Apple Inc. v. SightSound Techs., LLC*, CBM2013-00019, Paper No. 17, at *3, *10 (P.T.A.B. Oct. 8, 2013); *Apple Inc. v. SightSound Techs., LLC*, CBM2013-00020, Paper No. 14, 3, at *11–12 (P.T.A.B. Oct. 8, 2013).

240. *Apple Inc. v. SightSound Techs., LLC*, CBM2013-00021, Paper No. 13, at *11 (P.T.A.B. Oct. 8, 2013); *Apple Inc. v. SightSound Techs., LLC*, CBM2013-00023, Paper No. 12, at *13 (P.T.A.B. Oct. 8, 2013).

241. *Apple Inc. v. SightSound Techs., LLC*, CBM2013-00019, Paper 17, at *11–12 (P.T.A.B. Oct. 8, 2013); *Apple Inc. v. SightSound Techs., LLC*, CBM2013-00020, Paper 14, 12, at *14 (P.T.A.B. Oct. 8, 2013) (internal citations omitted).

242. *Liberty Mut. Ins. Co. v. Progressive Cas. Ins. Co.*, CBM2012-00002, Paper No. 66, at *4 (P.T.A.B. Jan. 23, 2014).

243. *Id.* at *5–6.

Table 6: Covered Business Method Patent Definitions

AIA	“[A] method or corresponding apparatus for performing data processing or other operations used in the practice, administration, or management of financial products or services” excluding “technological inventions.” ²⁴⁴
PTO	Technological inventions will be assessed on a case-by-case basis determined by “whether the subject matter as a whole recites a technological feature that is novel and unobvious . . . and solves a technical problem using a technical solution.” ²⁴⁵
PTAB	Allows challenges to “patents claiming activities that are financial in nature, incidental to financial activity, or complementary to financial activity.” ²⁴⁶
	Patents outside of PTO Class 705 eligible for review ²⁴⁷
	“[T]he electronic sale of digital audio” financial in nature and eligible for review. ²⁴⁸
	“The electronic sale of something, including charging a fee to a party’s account, is a financial activity, and allowing such a sale amounts to providing a financial service,” and is eligible for review. ²⁴⁹
	“[A] <i>patent</i> is eligible for a covered business method patent review if the subject matter of at least one claim is directed to a covered business method.” ²⁵⁰

244. Leahy-Smith America Invents Act § 18(d)(1) (2011).

245. 37 C.F.R. § 42.301(b) (2013).

246. Apple Inc. v. SightSound Techs., LLC, CBM2013-00019, Paper No. 17, at *10 (P.T.A.B. Oct. 8, 2013) (quoting Transitional Program for Covered Business Method Patents—Definitions of Covered Business Method Patent and Technological Invention, 77 Fed. Reg. 48734, 48736 (Aug. 14, 2012)).

247. Apple Inc. v. SightSound Techs., LLC, CBM2013-00019, Paper 17 (P.T.A.B. Oct. 8, 2013); Apple Inc. v. SightSound Techs., LLC, CBM2013-00020, Paper 14 (P.T.A.B. Oct. 8, 2013).

248. *Id.*

249. Apple Inc. v. SightSound Techs., LLC, CBM2013-00021, Paper 13 (P.T.A.B. Oct. 8, 2013); Apple Inc. v. SightSound Techs., LLC, CBM2013-00023, Paper 12 (P.T.A.B. Oct. 8, 2013).

250. Liberty Mut. Ins. Co. v. Progressive Cas. Ins. Co., CBM2012-00002, Paper No. 66, at *6 (P.T.A.B. Jan. 23, 2014).

2. *Grounds for Review and Prior Art Available for Challenge*

Although IPR challenges are available for any patent, IPR most restricts the grounds that can be used to invalidate patents and the prior art available for review. PGR and CBMR allow more flexible grounds to challenge patents and have few restrictions on prior art. IPR challenges are limited to novelty and obviousness under 35 U.S.C. § 102 and § 103 based solely on prior art consisting of patents and printed publications.²⁵¹ PGR and CBMR, on the other hand, allow challenges “on any ground that could be raised under paragraph (2) or (3) of section 282(b),” which relates to “invalidity of the patent or any claim.”²⁵²

Section 101 is a proper ground to challenge patent validity despite not being explicitly listed in § 282(b).²⁵³ The PTAB addressed this point directly, noting that both the Supreme Court²⁵⁴ and the Federal Circuit²⁵⁵ have held Section 101 to be a condition of patentability that can be raised as an affirmative defense under Section 282(b)(2). Additionally, Congress intended to allow challenges under § 101 in PGR and CBMR. The legislative history indicates that Congress believed many business method patents are no longer patentable under the Supreme Court’s *Bilski* decision,²⁵⁶ as *Bilski* “sharply pulled back on the patenting of business methods, emphasizing that these ‘inventions’ are too abstract to be patentable.”²⁵⁷

Similarly, the prior art that can be used to challenge patents in IPR, PGR, and CBMR differs, partly because of the distinctive grounds that can be used

251. See Leahy-Smith America Invents Act § 6(a)(31)(b) (2011).

252. *Id.* § 6(d)(321)(b).

253. See 35 U.S.C. § 282(b) (2012). See also *SAP Am., Inc. v. Versata Dev. Grp., Inc.*, CBM2012-00001, Paper No. 36, at *32–36 (P.T.A.B. Jan. 9, 2013). However, some scholars have argued that § 101 should not be considered an invalidity defense and therefore not an available ground to invalidate a patent. See, e.g., Dennis Crouch, *Hricik: Why Section 101 is Neither a “Condition of Patentability” nor an Invalidity Defense*, PATENTLY-O (Sept. 16, 2013), <http://www.patentlyo.com/patent/2013/09/hricik-why-section-101-is-neither-a-condition-of-patentability-nor-an-invalidity-defense.html>.

254. See *SAP Am., Inc. v. Versata Dev. Grp., Inc.*, CBM2012-00001, Paper No. 36, at *32–36 (P.T.A.B. Jan. 9, 2013) (explaining that in *Graham v. John Deere Co.*, 383 U.S. 1, 12 (1966), the Supreme Court declared § 101 to be a condition of patentability and addressed § 101 as a defense to infringement under § 282 in *Mayo Collab. Servs. v. Prometheus Labs.*, 132 S. Ct. 1289 (2011)).

255. See *id.* at 33 (citing the Federal Circuit’s ruling in *Dealertrack, Inc. v. Huber*, 674 F.3d 1315, 1330 n.3 (Fed. Cir. 2012), which rejected the contention that § 101 is not a condition of patentability and that § 101 was not a defense that can be brought under § 282).

256. *Bilski v. Kappos*, 130 S. Ct. 3218 (2010).

257. See *Matal*, *supra* note 25, at 627 (quoting 157 CONG. REC. S1367 (daily ed. Mar. 8, 2011) (describing the Senate Republican Policy Committee’s explanation of the need for § 18 of the America Invents Act)).

to challenge patents and partly to rein in discovery costs. An IPR petitioner may only cite patents and printed publications as prior art.²⁵⁸ In contrast, PGR petitioners and CBMR petitioners challenging first-to-file patents have no prior art limitations.²⁵⁹ However, a CBMR petitioner challenging a first-to-invent patent for anticipation or obviousness is limited to: (i) prior art described in Section 102(a), as Section 102(a) was written before the enactment of the AIA;²⁶⁰ and prior art described in Section 102(b), as Section 102(b) also predated the AIA, if that prior art is publicly accessible.²⁶¹

3. Procedural Filing Restrictions

IPR, PGR, and CBMR each have filing restrictions that limit the availability of the review. These are discussed in depth below.

Two timing-based limitations restrict when a petition for IPR may be filed. First, patents that are eligible for PGR or are currently in an instituted PGR cannot be challenged in IPR until nine months after the patent grant (for first-to-file patents)²⁶² or after the conclusion of an instituted PGR.²⁶³ Additionally, a petition must be filed within one year after the petitioner has been served with a complaint alleging infringement of that patent to petition for IPR.²⁶⁴ Although seemingly straightforward, the one-year bar to filing an IPR petition has been challenged in a variety of ways, and it has been subject to differing interpretations.

The PTAB has begun to address some of the outstanding questions surrounding the one-year bar to an IPR challenge through its institution decisions. The effect of a voluntarily dismissed infringement action, infringement counterclaims, successive lawsuits involving the same patent, and joining additional parties to an IPR more than a year after being sued for infringement have been addressed by PTAB. Additional concerns that may affect potential petitioners remain, however.

258. See Leahy-Smith America Invents Act § 6(a)(311)(b) (2011).

259. See *id.* § 6(d).

260. See *id.* § 18(a)(1)(C).

261. See Matal, *supra* note 25, at 632–33. The Republican Policy Committee summary of the Senate floor managers' amendment of subclause II of the Leahy-Smith America Invents Act § 18(a)(1)(C) states that this subclause encompasses "effectively, old 102(b) prior art but limited to old 102(a)'s publicly-available prior-art scope." 157 CONG. REC. S1367 (daily ed. Mar. 8, 2011).

262. 37 C.F.R. § 42.102(a)(1) (2013). The AIA does not specify that parties must wait nine months only for first-to-file patents, but USPTO regulations clarify this. See *id.* This requirement is logical, as there is no reason to wait nine months for a patent that is not eligible for PGR.

263. Leahy-Smith America Invents Act § 6(a)(311)(c)(2) (2011).

264. *Id.* § 6(a)(315)(b).

Two separate PTAB panels have issued conflicting opinions on whether the one-year bar applies after an infringement suit has been filed and voluntarily dismissed. The AIA seems to indicate that the one-year time limitation runs from the initial service of the complaint, even if the plaintiff voluntarily dismisses the suit under F.R.C.P. Rule 41(a)(1),²⁶⁵ despite such a suit being “generally [] treated by the courts as if it had never been filed.”²⁶⁶ In *Macauto U.S.A. v. BOS GmbH & KG*, the first PTAB decision addressing the issue, the PTAB did not share this interpretation of the AIA and instituted a review, even though the complaint for a dismissed suit was served on the petitioner more than one year before the petition for IPR.²⁶⁷ The board concluded that “the dismissal of the earlier action . . . nullifies the effect of the alleged service of the complaint” and that the voluntary dismissal “render[ed] the proceedings a nullity.”²⁶⁸ However, in a later case, a five-member PTAB panel ruled that the petitioner was barred from filing an IPR challenge two and a half years after the petitioner was accused of infringement in a voluntarily dismissed countersuit.²⁶⁹ There were no overlapping judges in these conflicting decisions and neither decision is precedential, leaving open the possibility for additional interpretations by later panels.²⁷⁰

The PTAB also held in *St. Jude Medical, Cardiology Division, Inc. v. Volcano Corp.* that a counterclaim of infringement is equivalent to being served with a complaint for application of the one-year bar.²⁷¹ For the purposes of the one-year bar, the court found, “the phrase ‘complaint alleging infringement of the

265. See Jeff B. Vockrodt et al., *Don't Let Your Right to Inter Partes Review Slip Away*, LAW360 (Aug. 29, 2012, 1:43 PM), <http://www.law360.com/articles/369839/don-t-let-your-right-to-inter-partes-review-slip-away>.

266. See *Nelson v. Napolitano*, 657 F.3d 586, 587 (7th Cir. 2011).

267. See Ryan Davis, *Inter Partes Review Not Barred by Tossed Suit, USPTO Says*, LAW360 (Jan. 25, 2013, 8:56 PM), <http://www.law360.com/articles/410128/inter-partes-review-not-barred-by-tossed-suit-uspto-says>; *Macauto U.S.A. v. BOS GmbH & KG*, IPR2012-00004, Paper No. 18, at *15–16 (P.T.A.B. Jan. 24, 2013).

268. See *Macauto U.S.A. v. BOS GmbH & KG*, IPR2012-00004, Paper No. 18, at *15–16 (P.T.A.B. Jan. 24, 2013).

269. *St. Jude Med., Cardiology Div. Inc. v. Volcano Corp.*, IPR2013-00258, Paper No. 29, at *3 (P.T.A.B. Oct. 16, 2013); see also Ryan Davis, *USPTO Explains AIA Review Deadline in Nixing St. Jude Case*, LAW360 (Oct. 22, 2013, 5:31PM), <http://www.law360.com/ip/articles/482112/uspto-explains-aia-review-deadline-in-nixing-st-jude-case>.

270. See Dennis Crouch, *Interpreting the IPR Deadline; Conflicting PTAB Decisions; and Appealing Nonappealable Decisions*, PATENTLY-O (Oct. 22, 2013), <http://www.patentlyo.com/patent/2013/10/interpreting-the-ipr-deadline.html>.

271. See *St. Jude Med., Cardiology Div. Inc. v. Volcano Corp.*, IPR2013-00258, Paper No. 29, at *3 (P.T.A.B. Oct. 16, 2013).

patent' . . . is sufficiently broad to include a counterclaim that alleges infringement."²⁷² In its determination, the PTAB rejected arguments that the Federal Rules of Civil Procedure distinguish complaints from countersuits, that the AIA distinguishes counterclaims in § 315(a), and that Congress used "charged with infringement" in Section 18 to denote more than complaints.²⁷³ None of these arguments, the board determined, provided sufficient support for the petitioner's assertion that counterclaims and complaints should be treated differently.²⁷⁴ The board further noted that it would "frustrate Congressional intent . . . [to] discriminat[e] among otherwise similarly-situated accused infringers."²⁷⁵

Further, in *Accord Healthcare, Inc. v. Eli Lilly & Co.*, the PTAB ruled that the one-year bar applies in situations where a party is charged with infringing a patent in multiple lawsuits, even if that party was most recently served within the past year.²⁷⁶ The board denied a petition to institute IPR on a patent that had been asserted against the petitioner in multiple lawsuits, once within the last year and the other more than a year before filing the petition.²⁷⁷ The board rejected the petitioner's argument "that the one-year period set forth in § 315(b) should not be measured from the date of service of the complaint in the [initial action]."²⁷⁸ The board also cited Congress's intent that IPR not be used as a tool for harassment through repeated administrative attacks, as this would frustrate IPR's purpose as an efficient, cost-effective alternative to litigation.²⁷⁹

Conversely, combining a petition filed outside the one-year window with a previously filed petition or joinder provisions may allow parties to avoid the one-year time bar.²⁸⁰ The PTAB has allowed a party to combine a petition filed outside of the one-year window with an existing petition filed within one year of being served with a complaint for infringement.²⁸¹

272. *See id.* at *7.

273. *St. Jude Med., Cardiology Div. Inc. v. Volcano Corp.*, IPR2013-00258, Paper No. 29, at *4–6 (P.T.A.B. Oct. 16, 2013).

274. *Id.*

275. *Id.* at *3.

276. *Accord Healthcare, Inc. USA v. Eli Lilly & Co.*, IPR2013-00356, Paper No. 13, at *2–3 (P.T.A.B. Oct. 1, 2013).

277. *Id.* at *2.

278. *Id.* at *3.

279. *Id.*

280. *See* Jennifer R. Gupta, *Avoiding the One-Year Time Bar*, AIABLOG.COM (Sept. 10, 2013), <http://www.aiablog.com/post-grant-proceedings/avoiding-the-ipr-one-year-time-bar/>. The AIA joinder provisions are discussed in more detail in Part C *infra* of this Note.

281. *See* *Microsoft Corp. v. Proxyconn Inc.*, IPR2013-00109, Paper No. 15 (P.T.A.B. Feb. 25, 2013).

Similarly, the one-year bar does not apply to parties seeking to join an existing IPR, yet the PTAB has discretion as to whether to allow joinder.²⁸² The PTAB has allowed one party, while denying another, the ability to join an existing IPR over a year after those parties were served with complaints alleging patent infringement.²⁸³ It appears that if the prospective joining party does not raise any new issues or would not complicate the existing IPR, the PTAB will be more willing to allow joinder. On the other hand, if the new petition raises substantive issues not originally addressed and would likely cause delay, the request is more likely to be delayed.²⁸⁴

The effects of stayed litigation, settlement negotiations, real party in interest, or privity of defendant have yet to be addressed by the PTAB. Stayed litigation may present an issue for a potential IPR challenge.²⁸⁵ Staying litigation pending the outcome of the IPR is not an issue, but a court may also stay the litigation pending the outcome of another party's reexamination of the patent or the outcome of concurrent litigation.²⁸⁶ This can force petitioners to file an IPR before they would ideally like to.²⁸⁷ Further, the one-year bar apparently has no provisions allowing parties to toll the litigation while they enter into settlement disputes.²⁸⁸ Finally, as the statute of limitations applies to any "real party in interest or privity" of the petitioner, customers that the petitioner is legally required to indemnify may be served without notifying the petitioner within the one-year time frame.²⁸⁹

Table 7 summarizes the key aspects of the IPR one-year bar.

282. See 35 U.S.C. § 315(b)–(c) (2012).

283. See Gupta, *supra* note 280. See, e.g., Sony Corp. of Am. v. Network-1 Security Solutions, Inc., IPR2013-00386, Paper No. 16 (P.T.A.B. July 29, 2013); Dell Inc. v. Network-1 Security Solutions, Inc., IPR2013-00385, Paper No. 17 (P.T.A.B. July 29, 2013).

284. See Gupta, *supra* note 280.

285. See Vockrodt et al., *supra* note 265.

286. See *id.*

287. See *id.*

288. See *id.*

289. See *id.*

Table 7: *Inter Partes* Review One-Year Bar—35 U.S.C. § 315(b)

AIA	IPR “may not be instituted if the petition . . . is filed more than 1 year after the date on which the petitioner is . . . served with a complaint alleging infringement of that patent.” ²⁹⁰	
	One-year bar does not apply to a party seeking to join an existing IPR ²⁹¹	
PTAB	Voluntarily Dismissed Infringement Action ²⁹²	“[T]he dismissal of the earlier action . . . nullifies the effect of the alleged service of the complaint” and petitioner is not barred from IPR. ²⁹³
		“Service of a complaint alleging infringement triggers applicability of § 315(b), even if that complaint is later dismissed with prejudice.” ²⁹⁴
	Counterclaim of infringement is equivalent to being served with a complaint under § 315(b). ²⁹⁵	
	In situations involving multiple infringement lawsuits arising from the same patent, the one-year period is measured from the date of service of the complaint in the initial action. ²⁹⁶	
	Petitions filed outside the one-year window can be combined with previously filed IPR petitions. ²⁹⁷	
A party seeking to join an existing IPR will have a higher likelihood of success provided the potential joinder does not raise any new issues or would not complicate the existing IPR. ²⁹⁸		

290. 35 U.S.C. § 315(b) (2012).

291. *See* 35 U.S.C. § 315(c).

292. *See supra* Section II.B.3 for a discussion of these conflicting PTAB decisions.

293. *Macauto USA v. BOS GmbH & KG*, IPR2012-00004, Paper No. 18, at *15–*16 (P.T.A.B. Jan. 24, 2013).

294. *St. Jude Med., Cardiology Div. Inc. v. Volcano Corp.*, IPR2013-00258, Paper No. 29 (P.T.A.B. Oct. 16, 2013).

295. *Id.*

296. *Healthcare, Inc. USA v. Eli Lilly & Co.*, IPR2013-00356, Paper No. 13 (P.T.A.B. Oct. 1, 2013).

297. *See Microsoft Corp. v. Proxyconn Inc.*, IPR2013-00109, Paper No. 15 (P.T.A.B. Feb. 25, 2013).

298. *See Dell Inc. v. Network-1 Sec. Solutions, Inc.* IPR2013-00385, Paper No. 17 (P.T.A.B. July 29, 2013); *Sony Corp. of Am. v. Network-1 Sec. Solutions, Inc.* IPR2013-00386, Paper No. 16 (P.T.A.B. July 29, 2013).

Additionally, any petition for PGR must be filed within nine months of the grant of the patent or within nine months of patent reissue.²⁹⁹ However, a patent that has been narrowed and reissued cannot be challenged unless the original patent was still eligible for PGR.³⁰⁰

CBMR has its own filing restrictions as well. A petitioner for CBMR must have been sued for or charged with infringing the challenged patent.³⁰¹ The PTO defines “charged with infringement” as “a real and substantial controversy regarding infringement of a covered business method patent exists such that the petitioner would have standing to bring a declaratory judgment action in Federal court.”³⁰² Further, a party cannot petition for CBMR if the patent is still eligible for PGR.³⁰³ Additionally, CBMR of patents will no longer be available after September 16, 2020.³⁰⁴ The PTAB will consider all petitions for CBMR filed before that date.³⁰⁵

4. *Estoppel*

IPR or PGR petitioners are estopped from asserting any “claim on any ground that the petitioner raised or reasonably could have raised” during a review proceeding at the PTO in future proceedings at the PTO and in subsequent civil litigation or ITC proceeding.³⁰⁶ CBMR petitioners are estopped only on grounds that the petitioner raised during the review in subsequent civil and ITC litigation. CBMR petitioners cannot, however, raise any ground that they “reasonably could have raised” in the CBMR in later proceedings at the PTO for the same patent.³⁰⁷ Additionally, estoppel does not apply when parties settle prior to a final written decision or if the PTAB declines to review the patent.³⁰⁸

The estoppel provisions take effect immediately upon the PTAB issuing a final written decision.³⁰⁹ This differs from reexamination, where estoppel takes effect after a claim has been “finally determined as valid and

299. Leahy-Smith America Invents Act § 6(d)(321)(c) (2011).

300. *Id.* § 6(d)(325)(f).

301. *Id.* § 18(a)(1)(B).

302. 37 C.F.R. § 42.302(a) (2013).

303. 37 C.F.R. § 42.303.

304. *See* Leahy-Smith America Invents Act § 18(a)(3)(A).

305. *Id.* § 18(a)(3)(B).

306. 35 U.S.C. §§ 315(e)(1), 325(e)(1) (2011).

307. Leahy-Smith America Invents Act § 18(a)(1)(A) (2011). Note that 35 U.S.C. § 325(e)(2) does not apply as per this subsection of the statute.

308. 35 U.S.C. §§ 317(a), 327(a).

309. *See* 35 U.S.C. §§ 315(e)(2), 325(e)(2).

patentable.”³¹⁰ The Federal Circuit interprets “finally determined” as occurring after all appeals have been exhausted.³¹¹ The AIA makes clear that estoppel takes effect upon the PTAB issuing its final written decision, and not after appeal to the Federal Circuit.³¹²

5. *Threshold to Institute Review*

The threshold showing a petitioner must make to the PTO before it will institute a review is higher for PGR and CBMR compared to IPR, and all have a higher threshold than what is required for *ex parte* reexaminations. A PGR or CBMR petitioner must demonstrate that it is “more likely than not that at least 1 of the claims challenged in the petition is unpatentable” or show that there is a “novel or unsettled legal question that is important to other patents or patent applications.”³¹³ For the PTAB to institute an IPR, the petitioner must show “that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.”³¹⁴ *Ex parte* reexaminations, as well as the former *inter partes* reexamination, required the petitioner show that “a substantial new question of patentability” (“SNQ”) exists.³¹⁵

The differences between the thresholds are meaningful, and they are not simply semantic variations of the SNQ standard.³¹⁶ The legislative history of the AIA, as well as the AIA itself, indicates that the three standards are supposed to have meaningful differences.³¹⁷ The SNQ standard, according to the PTO, asks whether the examiner would consider prior art important in

310. See Abhay A. Watwe, *IPR: Scope of Estoppel*, AIABLOG.COM (Jun. 7, 2013), <http://www.aiablog.com/post-grant-proceedings/ipr-scope-of-estoppel/>.

311. See *id.*

312. See 35 U.S.C. §§ 315(e)(2), 325(e)(2).

313. 35 U.S.C. § 324(a)–(b).

314. Leahy-Smith America Invents Act § 6(a)(314)(a) (2011).

315. See 35 U.S.C. § 303(a).

316. See MaryAnne Armstrong et al., *Starting an AIA Post-Grant Proceeding*, LAW360 (Aug. 17, 2012, 1:51 PM), <http://www.law360.com/articles/364614/starting-an-aia-post-grant-proceeding>.

317. See *id.* The AIA changes the standard for *inter partes* review by “[s]triking ‘a substantial new question of patentability affecting a claim of the patent is raised’ and inserting ‘it has been shown that there is a reasonable likelihood that the requester would prevail with respect to at least 1 of the claims challenged in the request.’” Leahy-Smith America Invents Act § 6(c)(3)(A)(ii). But, the AIA leaves the substantial new question of patentability standard for the new supplemental examination procedure, *id.* § 12(a)(257)(a), and creates a new standard for post-grant review: “it is more likely than not that at least 1 of the claims challenged in the petition is unpatentable.” *Id.* § 6(d)(324)(a).

considering the patentability of the claim.³¹⁸ This standard has allowed reexaminations to be instituted in over ninety percent of all cases, and it is widely regarded as an easy burden to meet.³¹⁹ Congress intended the “reasonable likelihood” standard to be a higher burden than the SNQ standard, similar to a showing for a preliminary injunction that “effectively requires the petitioner to present a prima facie case justifying a rejection of the claims in a patent.”³²⁰ The chief judge of the PTAB has further explained that the threshold for PGR and CBMR is different than the threshold for IPR, with the “reasonable likelihood” standard lower than the “more likely than not” standard.³²¹ This is consistent with Congress’s discussions about PGR and CBMR. Some noted that because additional issues may be raised in those proceedings, some requiring more substantial discovery, it would be important to ensure that there is a high likelihood of the claims being rejected.³²²

Data compiled from PTAB institution decisions shows that the PTO instituted IPRs in slightly lower percentages than *ex parte* or *inter partes* reexaminations. The PTAB has made 210 IPR institution decisions as of October 11, 2013.³²³ Of the 210, the PTAB has instituted a review of all the requested claims in 73.3 percent of petitions, another 13.8 percent have had review instituted on a partial number of claims, and 12.9 percent of petitions have been completely rejected.³²⁴ Viewed solely on the basis of the number of claims allowed or denied, the PTAB has instituted review for 80.4 percent of claims and rejected the remaining 19.6 percent.³²⁵ Thus, it does appear that the “reasonable likelihood” standard is higher than the SNQ standard.

The PTAB made decisions in eighteen CBMR petitions within the first year CBMR was available.³²⁶ Twelve have been granted while three have been

318. See Armstrong et al. *supra* note 316 (citing MPEP § 2242 (8th ed. 2001) (Rev. 9, Aug. 2012)).

319. See *id.*

320. See *id.* (quoting 112 CONG. REC. S1375 (daily ed. March 8, 2011) (statement of Sen. Jon Kyl)).

321. Message from Chief Judge James Donald Smith, Board of Patent Appeals and Interferences: USPTO Discusses Key Aspects of New Administrative Patent Trials, U.S. PATENT AND TRADEMARK OFFICE, http://www.uspto.gov/aia_implementation/smith-blog-extravaganza.jsp (last visited Feb. 12, 2014).

322. See *id.*

323. See Sommer, *supra* note 215, at 1.

324. See *id.*

325. See *id.* at 2.

326. See Anthony H. Sheh, *Year One of the Transitional Program For Covered Business Method Patents: Petitions and Promise*, AIABLOG.COM (Sept. 18, 2013), <http://www.aiablog.com/post-grant-proceedings/year-one-of-the-transitional-program-for-covered-business-method-patents-petitions-and-promise/>.

denied.³²⁷ Another three were dismissed without an institution decision.³²⁸ Thus, the board has granted eighty percent of CBM petitions and denied the other twenty percent. This is lower than the success rate under both the SNQ standard for reexaminations and the “reasonable likelihood” standard for IPR, which is to be expected, but the limited number of decisions makes it difficult to draw inferences about a petitioner’s chances in CBMR petitions.

The PTAB’s decision to institute or deny a review cannot be appealed.³²⁹ A party unsatisfied with an institution decision may petition for rehearing, but the panel will review the institution decision for abuse of discretion, making a change in the institution decision unlikely.³³⁰

Lack of the ability to appeal an institution decision may not present difficulties when petitions are rejected on the merits, but problems arise when multiple panels interpret the law inconsistently. As noted above, two PTAB panels have arrived at conflicting interpretations of the implications of the § 315(b) one-year bar for IPR petitioners who were subject to voluntarily dismissed infringement suits.³³¹ One panel held that a petitioner was barred from filing for IPR, while another panel held that the voluntarily dismissed suit should be treated as if it never existed. Neither decision is binding because PTAB decisions are not binding on future panels unless the decision is made precedential under the PTAB’s operating procedure.³³² This means that another panel is free to interpret the one-year bar in another case.³³³

The Federal Circuit has the ability to resolve this uncertainty, but as the decision cannot be directly appealed, petitioners or patent owners would have to use an alternative route to the appeals court. A *mandamus* action or a separate collateral attack on the final judgment, neither ordinarily considered an appeal, might provide a way to challenge an institution decision.³³⁴ Currently a *writ of mandamus* challenging the one-year bar is pending at the Federal Circuit, based on the argument that the writ avoids both the prohibition on appeals and the lack of statutory support authorizing an

327. *See id.*

328. *See id.*

329. *See* Leahy-Smith America Invents Act §§ 6(a)(314)(d), 6(d)(324)(e) (2011); 37 C.F.R. § 42.71(c) (2013).

330. 37 C.F.R. § 42.71(c).

331. *See supra* Section II.B.3 for a review of *inter partes* review one-year bars.

332. *See* Crouch, *supra* note 270 (citing MICHAEL FLEMING, BOARD OF PATENT APPEALS AND INTERFERENCES, STANDARD OPERATING PROCEDURE 2 (REVISION 7) PUBLICATION OF OPINIONS AND BINDING PRECEDENT (2008), available at <http://www.uspto.gov/ip/boards/bpai/procedures/sop2.pdf>).

333. *See id.*

334. *See id.*

appeal.³³⁵ The patent owner claims that the Board improperly interpreted § 315(b), that the decision involves “important issues of first impression that involve alleged usurpation of power,” and that the institution of an IPR cannot be remedied by a reversal on appeal.³³⁶

6. Claim Amendments

A patent owner may cancel claims or propose a reasonable number of substitute claims during a challenge under IPR, PGR, or CBMR.³³⁷ The PTO has interpreted a “reasonable number of substitute claims” as a presumption that one substitute claim will be required for each challenged claim.³³⁸

The PTAB’s initial IPR claim construction decisions show that patent owners will be limited in their claim amendments.³³⁹ Patent owners are expected to explain and prove why the amended claim is patentable over prior art instead of petitioners having to prove that the amended claims are invalid.³⁴⁰ Further, the patent owner is required to explain why the claim is patentable over art not cited in the IPR, essentially requiring the patent owner to discuss prior art that is closest to the claim.³⁴¹ The patent owner must also explain the significance of the proposed feature to be added from the point of view of a person skilled in the art.³⁴² Compounding the burden on patent owners is the PTAB’s strict adherence to a fifteen-page, double-spaced limit on the patent owner’s motion to amend, making it very difficult for patent owners to fully support their amendments.³⁴³ In general, patent

335. See Dennis Crouch, *Challenging the PTO’s NonAppealable Decisions to Grant or Deny Petitions for Inter Partes Review*, PATENTLY-O (Oct. 25, 2013), <http://www.patentlyo.com/patent/2013/10/challenging-the-ptos-nonappealable-decisions-to-grant-or-deny-petitions-for-inter-partes-review.html> (citing *In re MCM Portfolios LLC*, No. 2014-104 (Fed. Cir. 2014) (pending on petition for writ of mandamus)).

336. See Petition for Writ of Mandamus, *In re MCM Portfolio LLC*, No. 2014-104 at *7 (Fed. Cir. Oct. 21, 2014).

337. See Leahy-Smith America Invents Act §§ 6(a)(316)(d)(1)(A)–(B), 6(a)(326)(d)(1)(A)–(B) (2011).

338. 37 C.F.R. §§ 42.121(a)(3), 42.221(a)(3) (2013).

339. See Don Daybell et al., *Inter Partes Review: A Major Change For Claim Amendments*, LAW360 (Aug. 14, 2013 11:43 AM), <http://www.law360.com/articles/462021/inter-partes-review-a-major-change-for-claim-amendments>.

340. See *id.* (citing *Idle Free Sys. Inc. v. Bergstrom Inc.*, IPR2012-00027, Paper No. 26 (P.T.A.B. June 11, 2013)).

341. See *id.*

342. See *id.* (citing *Avaya Inc. v. Network-1 Sec. Solutions Inc.*, IPR2013-00071, Paper No. 38 (P.T.A.B. July 22, 2013)).

343. See *id.* (citing *Innolux Corp. v. Semiconductor Energy Lab. Co. Ltd.*, IPR2013-00066, Paper No. 23 (P.T.A.B. June 3, 2013); 37 C.F.R. § 42.121(b); see also Sommer, *supra* note 215, at 6 (discussing the PTAB’s decision in *Bloomberg Inc. v. Mkts.-Alert Pty. Ltd.*, CBM2013-00005, Paper No. 53, at *2–4 (P.T.A.B. Oct. 10, 2013), in which the court refused

owners are much more limited in their claim amendments relative to reexamination proceedings.³⁴⁴

C. ADDITIONAL CONSIDERATIONS

This section discusses information pertaining to IPR, PGR, and CBMR petitions, joinder provisions, the PTO's actions when one patent is undergoing multiple PTO procedures, the effect of settlements, and appeals of final written decisions.

The petition for IPR, PGR, or CBMR may be filed by anyone but the patent owner³⁴⁵ and must follow the requirements set forth in the AIA and by the PTO. It must be filed with the appropriate fees,³⁴⁶ as well as identify "all real parties in interest"³⁴⁷ and the particular claims challenged.³⁴⁸ The grounds for challenging each claim must be stated, and evidence for those grounds—including copies of patents and printed publications, as well as expert affidavits or declarations—must be filed with the petition.³⁴⁹ In addition, copies of the petition and supporting material must be submitted to the patent owner or the patent owner's representative.³⁵⁰ The PTO has also established more specific requirements for petitions.³⁵¹

Following the receipt of a petition, the patent owner has an opportunity to file a preliminary response and argue why a review is unwarranted.³⁵² The preliminary response is optional, but it must be filed within three months of the filing date of the petition for review.³⁵³

The AIA joinder provisions for post-grant proceedings grant the Director discretionary authority to join parties who have properly filed petitions for an IPR, notwithstanding timing limitations,³⁵⁴ or for a PGR or

to grant the patent owner ten additional pages to support amendments to four claims where the petitioner only raised a half-page argument based on additional grounds of unpatentability).

344. Daybell et al., *supra* note 339.

345. Leahy-Smith America Invents Act §§ 6(a)(311)(a), 6(d)(321)(a) (2011).

346. *Id.* § 6(d)(322)(a)(1).

347. *Id.* § 6(d)(322)(a)(2).

348. *Id.* § 6(d)(322)(a)(3).

349. *Id.*

350. *Id.* § 6(d)(322)(a)(5).

351. *See* 37 C.F.R. §§ 42.6, 42.8, 42.22, 42.24, 42.104, 42.204, 42.304 (2013). These provisions relate generally to formatting of documents, proper notice, required information and content, page limits, and other similar information for any materials submitted to the Board.

352. *See* Leahy-Smith America Invents Act §§ 6(a)(313), 6(d)(323) (2011).

353. 37 C.F.R. §§ 42.107(a)–(b), 42.207(a)–(b).

354. Leahy-Smith America Invents Act § 6(a)(315)(c).

CBMR.³⁵⁵ PTO regulations require the patent owner or petitioner to move for joinder within one month of the institution date of review³⁵⁶ and to specify that the one-year bar under 35 U.S.C. § 315(b) does not apply when the request for joinder accompanies a petition for IPR.³⁵⁷

The PTAB has denied a petitioner's request in a CBMR to add additional parties that did not file a petition for the review. The board held that the statutory framework for joinder in a CBMR (or PGR) provides for "the situation where a party might wish to join an additional petition with an already instituted proceeding, and provides a way to do so."³⁵⁸ As a case of first impression, the Board noted that the petitioner had failed to state what authorized the Board to join additional parties to an already filed petition without filing an additional petition.³⁵⁹

Additionally, the PTAB has the authority to stay, transfer, consolidate, or terminate a matter involving a patent concurrently undergoing an AIA review in another PTO proceeding.³⁶⁰ The PTO has favored staying reexaminations involving patents undergoing an IPR. In one case, an *inter partes* reexamination was stayed pending the outcome or termination of an IPR because the PTO felt that conducting the proceedings in parallel would duplicate efforts and might result in inconsistencies.³⁶¹ Even though there was no overlap between the claims undergoing reexamination and IPR, the independent claim underlying those claims would be analyzed in each proceeding.³⁶² Further, any amendments made during reexamination would affect the results of the IPR, and the prior art used in both challenges was also similar.³⁶³ The quick turnaround for IPR led the Board to believe that IPR would simplify reexaminations, and the Board has exercised its discretion to stay reexaminations.³⁶⁴ The board, however, has also stayed *ex*

355. *Id.* § 6(d)(325)(c).

356. *See* 37 C.F.R. §§ 42.122(b), 42.222(b).

357. *See* 37 C.F.R. § 42.122(b).

358. *U.S. Bancorp v. Ret. Capital Access Mgmt. Co. LLC*, CBM2013-00014, Paper No. 8, at *3 (P.T.A.B. June 5, 2013).

359. *Id.* at *3–4.

360. *See Leahy-Smith America Invents Act* §§ 6(a)(315)(d), 6(d)(325)(d); 37 C.F.R. §§ 42.122 (b), 42.222(b).

361. *See Mita Chatterjee, PTAB Stays Concurrent Inter Partes Reexamination In Favor of IPR of Same Patent*, AIABLOG.COM (Apr. 4, 2013), <http://www.aiablog.com/post-grant-proceedings/ptab-stays-concurrent-inter-partes-reexamination-in-favor-of-ipr-of-same-patent/> (discussing *CBS Interactive Inc. v. Helferich Patent Licensing, LLC*, IPR2013-00033, Paper No. 15 (P.T.A.B. Nov. 6, 2012)).

362. *See id.*

363. *See id.*

364. *See id.*

parte reexaminations in favor of IPR.³⁶⁵ In one case, a petition for IPR was filed over a year after a reexamination began, challenging the same claims but raising different grounds of unpatentability based on different prior art.³⁶⁶ Again, the Board feared duplicating efforts and reaching inconsistent results between the two proceedings.³⁶⁷

The PTAB has declined to stay *ex parte* continuation applications, however. Although the Board has exclusive jurisdiction over every involved application or patent during the proceeding, it has explained that an “involved patent” is the patent in the proceeding and the “involved application” is an application subject to a derivation proceeding.³⁶⁸ Thus, the PTAB is unlikely to stay or suspend concurrent proceedings directly related to a challenged patent.³⁶⁹

The parties to an IPR, PGR, or CBMR may settle at any time prior to the final determination by the PTAB.³⁷⁰ If no petitioner remains in an IPR, PGR, or CBMR, the PTO can terminate the review or proceed to a final written decision,³⁷¹ although the Board “expects that a proceeding will terminate after the filing of a settlement agreement.”³⁷² Parties are required to file a written agreement memorializing the settlement with the PTAB.³⁷³ This agreement will be kept confidential at the request of the parties.³⁷⁴

If IPR, PGR, or CBMR is instituted and not dismissed, the PTAB will issue a final written decision with regard to the patents challenged at the institution of the review and any patents proposed or amended during the review.³⁷⁵ The AIA permits an appeal of a PTAB final decision under 35 U.S.C. § 141.³⁷⁶ Section 141 permits any party to an IPR or PGR to appeal directly to the Federal Circuit.³⁷⁷

365. See Timothy P. McNulty, *Ex Parte Reexamination Stayed In Favor of Inter Partes Review*, AIABLOG.COM (Aug. 12, 2013), <http://www.aiablog.com/post-grant-proceedings/ex-parte-reexamination-stayed-in-favor-of-inter-partes-review/>.

366. See *id.* (discussing *Lumondi Inc. v. Lennon Image Techs. LLC*, IPR2013-00432, Paper No. 7 (P.T.A.B. Aug. 6, 2013)).

367. See *id.*

368. See *id.*

369. See *id.*

370. 35 U.S.C. §§ 317, 327 (2012).

371. 35 U.S.C. §§ 317(a), 327(a).

372. Office Patent Trial Practice Guide, 77 Fed. Reg. 48,756, 48, 768 (Aug. 24, 2012).

373. 35 U.S.C. §§ 317(b), 327(b).

374. *Id.*

375. 35 U.S.C. §§ 318(a), 328(a).

376. 35 U.S.C. §§ 319, 329.

377. 35 U.S.C. § 141(c).

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III. CONCLUSION

IPR, PGR, and CBMR offer accused patent infringers a viable, non-judicial alternative to adjudicate patent validity disputes. The limited discovery, potential litigation stays, and short time to resolution help keep AIA reviews cost-effective. Although drawbacks and limitations exist, including the estoppel attached to a final written decision and limited access to review, Congress appears to have successfully balanced patent holder concerns with the need to more efficiently adjudicate these disputes. The data drawn from over one year of AIA reviews show that these procedures are effective and will continue to gain popularity among accused patent infringers.

APPENDIX

Table A1: Summary

PTO Procedure	<i>Inter Partes</i> Review	Post-Grant Review	Covered Business Method Review
Patent Type	All	First-to-file patents ³⁷⁸	Business method patents ^{379,380,381}
Petitioner	Anyone may petition for review except for the patent owner ³⁸²		
Grounds for Review	§§ 102, 103 ³⁸³	Any defense relating to invalidity, including § 101 ³⁸⁴	
Prior Art Limitations	Patents and printed publications ³⁸⁵	None	First-to-invent patent challenges under § 102 and § 103 limited to (i) pre-AIA § 102(a) prior art (ii) publicly available pre-AIA § 102(b) prior art ³⁸⁶
Procedural Filing Restrictions	If PGR eligible patent, must wait 9 months after issue ³⁸⁷ or until conclusion of instituted PGR ³⁸⁸	Must file within 9 months of patent grant or reissue of patent ³⁸⁹	Must have been sued for, or charged with, infringing the challenged patent ³⁹⁰
	Must file within 1 year after being served with a complaint alleging infringement ³⁹¹	Narrowed, reissued patents cannot be challenged if original could not be challenged ³⁹²	Cannot petition for CBMR if patent is still eligible for PGR ³⁹³
Petition Must Identify	1) All real parties in interest, 2) each claim challenged, 3) grounds for each challenge, and 4) evidence supporting grounds for each challenge ^{394,395}		
Preliminary Response	Patent owner can file response and set forth reasons why review should not be instituted ³⁹⁶		
Threshold to Institute Review	Reasonable likelihood that one or more claims are invalid ³⁹⁷	More likely than not at least one claim is unpatentable, ³⁹⁸ or petition raises a novel legal question of patentability ³⁹⁹	
Fees ⁴⁰⁰	\$9,000 request fee \$200 per claim in excess of 20 \$14,000 post-institution fee \$400 per claim in excess of 15	\$12,000 request fee \$250 per claim in excess of 20 in request \$18,000 post-institution fee \$550 per claim in excess of 15	
Time to Institution	Maximum of 6 months ⁴⁰¹		
Joinder	Director may join a party to an existing review notwithstanding timing limitations ⁴⁰²	If more than 1 petition is filed against the same patent the Director may combine the reviews into a single proceeding ⁴⁰³	

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PTO Procedure		<i>Inter Partes</i> Review	Post-Grant Review	Covered Business Method Review
Discovery Limited to		Deposition of witnesses submitting affidavits or declaration, and “what is otherwise necessary in the interest of justice” ⁴⁰⁴	“Evidence directly related to factual assertions advanced by either party in the proceeding” ⁴⁰⁵	
Claim Amendments		Patent owner may cancel claims, ⁴⁰⁶ or propose a reasonable number of substitute claims ⁴⁰⁷ Presumption that only one substitute claim will be required for each challenged claim ⁴⁰⁸		
Claim Construction		“Broadest reasonable construction in light of specification” ⁴⁰⁹		
Evidentiary Standard		Petitioner to prove invalidity by the preponderance of the evidence ⁴¹⁰		
Statutory Stay Considerations		None	If patent owner alleges infringement within three months of patent grant, the patent owner’s motion for a preliminary injunction cannot be stayed because of petition for or institution of a PGR ⁴¹¹	1) Simplify issues and streamline trial? 2) Discovery complete and trial date set? 3) Tactically advantage moving party or unduly burden nonmoving party? 4) Reduce burden on the parties and the court? ⁴¹²
Relation to Petitioner’s Civil Challenge of Patent Validity	Filed With or After Petition	Real party in interest’s or petitioner’s civil action challenging patent validity, filed concurrently or after a petition for IPR/PGR/CBMR, will be automatically stayed until: patent owner moves court to lift the stay, or the patent owner brings infringement counterclaim or suit, or petitioner moves to dismiss civil action ^{413,414}		
	Before Petition	Review barred if petitioner or real party in interest has previously filed a civil action challenging validity ^{415,416}		
PTO Proceedings Involving Same Patent		Director has discretion to stay, transfer, consolidate, or terminate any proceeding ^{417,418}		
Time to Decision		Maximum of 12–18 months from institution decision ^{419,420}		
Written Decision Estoppel	Civil /ITC	Any ground raised or reasonably could have been raised ^{421,422}		Any ground <i>actually</i> raised ⁴²³
	PTO Action	Any ground raised or reasonably could have been raised ^{424,425}		
Effect of Settlement		Estoppel provisions do not apply ^{426,427}		
Appeal		Can appeal ruling to Federal Circuit under §§ 141–144 ^{428,429}		
Sunset Provision		None	None	Program ends September 16, 2020 ⁴³⁰

378. Leahy-Smith America Invents Act § 6(d)(329)(f)(1)(A) (2011).
379. *Id.* § 18(a)(1)(e).
380. *Id.* § 18(d)(1). “A covered business method patent” means a patent that claims a method or corresponding apparatus for performing data processing or other operations used in the practice, administration, or management of a financial product or service. This does not include patents for technological innovations. The PTO determines the meaning of “technological invention.” *Id.*
381. 37 C.F.R. § 42.301(b) (2013) (Whether patent is for technological invention solely for purposes of CBMR, “the following will be considered on a case-by-case basis: whether the claimed subject matter as a whole recites a technological feature that is novel an unobvious over the prior art; and solves a technical problem using a technical solution.”).
382. Leahy-Smith America Invents Act §§ 6(a)(311)(a), 6(d)(321)(a).
383. *Id.* § 6(a)(311)(b).
384. *Id.* § 6(d)(321)(b). This provision references any ground that could be raised under paragraph (2) or (3) of Section 282(b) (relating to invalidity of the patent or any claim). Although § 101 is not listed in that section, it can be challenged under the AIA post-grant review procedure. *See* SAP Am., Inc. v. Versata Dev. Grp., Inc., CBM2012-00001, Paper No. 36, at *32–*36 (P.T.A.B. Jan. 9, 2013).
385. Leahy-Smith America Invents Act § 6(a)(311)(b).
386. *Id.* § 18(a)(1)(C).
387. 37 C.F.R. § 42.102(a)(2) (2012). The AIA does not specify that you must wait nine months only for first-to-file patents, but PTO regulations clarify this. This makes sense, since there is no reason to wait nine months for a patent that is not eligible for PGR.
388. Leahy-Smith America Invents Act § 6(a)(311)(c).
389. *Id.* § 6(d)(321)(c).
390. *Id.* § 18(a)(1)(B); 37 C.F.R. § 42.302(a) (“Charged with infringement means a real and substantial controversy regarding infringement of a covered business method patent exists such that the petitioner would have standing to bring a declaratory judgment action in Federal Court.”).
391. Leahy-Smith America Invents Act § 6(a)(315)(b).
392. *Id.* § 6(d)(325)(f).
393. 37 C.F.R. § 42.302(b).
394. Leahy-Smith America Invents Act § 6(a)(312)(a). Copies of patents and printed publications, as well as affidavits and declarations of expert opinions used as evidence, must be included along with the petition. *Id.*
395. *Id.* § 6(d)(322)(a).
396. *Id.* §§ 6(a)(313), 6(d)(323).
397. *Id.* § 6(a)(314)(a). The PTAB’s decision to institute a review cannot be appealed. *Id.* §§ 6(a)(314)(d), 6(d)(324)(e).
398. *Id.* § 6(d)(324)(a).
399. *Id.* § 6(d)(324)(b).
400. 37 C.F.R. § 42.15.
401. Leahy-Smith America Invents Act § 6(a)(314)(b). The PTAB has three months from the patent owner’s response to determine if it will institute a review. 37 C.F.R. § 42.107(b). The patent owner has three months to respond to petitioner’s request for review. *Id.*
402. Leahy-Smith America Invents Act § 6(a)(315)(c).
403. *Id.* § 6(d)(325)(c).
404. *Id.* § 6(a)(316)(a)(5).
405. *Id.* § 6(d)(326)(a)(5).
406. *Id.* §§ 6(a)(316)(d)(1)(A), 6(d)(326)(d)(1)(a).
407. *Id.* §§ 6(a)(315)(d)(1)(B), 6(d)(326)(d)(1)(b).

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408. 37 C.F.R. §§ 42.121(a)(3), 42.221(a)(3) (2013).
409. 37 C.F.R. §§ 42.100(b), 42.200(b), 42.300(b).
410. Leahy-Smith America Invents Act §§ 6 (d)(326)(e), 6(a)(316)(e).
411. *Id.* § 6(d)(325)(b).
412. *Id.* §§ 18(b)(1)–(2) (allowing an immediate interlocutory appeal, which the Federal Circuit reviews de novo to ensure consistency).
413. *Id.* § 6(a)(315)(a)(2). However, a counterclaim challenging patent validity does not count as a civil action filed to challenge validity. *Id.*
414. *Id.* § 6(d)(325)(a)(2).
415. *Id.* § 6(a)(315)(a)(1). However, a counterclaim challenging patent validity does not count as a civil action filed to challenge validity. *Id.* § 6(a)(315)(a)(3).
416. *Id.* § 6(d)(325)(a)(1). However, a counterclaim of invalidity does not count as a civil action filed to challenge validity. *Id.* § 6(d)(325)(a)(3).
417. *Id.* § 6(a)(315)(d).
418. *Id.* § 6(d)(325)(d).
419. *Id.* § 6(a)(316)(a)(11). The AIA requires that reviews must be completed within twelve months, although for good cause reviews may be extended to up to eighteen months. This gives a total time of eighteen to twenty-four months from filing to decision.
420. *Id.* § 6(d)(326)(a)(11). The PTAB is required to reach a final written decision within twelve months of institution, although review may be extended to up to eighteen months for good cause. This provides for a total time of eighteen to twenty-four months from petition to decision.
421. *Id.* § 6(a)(315)(e).
422. *Id.* § 6(d)(325)(e).
423. *Id.* § 18(a)(1)(D).
424. *Id.* § 6(a)(315)(e).
425. *Id.* § 6(d)(325)(e).
426. *Id.* § 6(a)(317).
427. *Id.* § 6(d)(327).
428. *Id.* § 6(a)(319).
429. *Id.* § 6(d)(329).
430. *Id.* § 18(a)(3)(a).

DAMAGING ROYALTIES: AN OVERVIEW OF REASONABLE ROYALTY DAMAGES

Zelin Yang[†]

Patent litigation is big business. The allure of massive reasonable royalties has led to the establishment of companies whose sole mission is to litigate and win patent wars. The number of patent actions has increased at an overall compound annual growth rate of seven percent since 1991.¹ It is not hard to find the incentive for these trends: the median damages award in 2012 was \$9.5 million, including three damages awards over \$1 billion.² More troubling than the large award amounts is the fact that median damage awards for non-practicing entities (“NPEs”), which include patent aggregators, universities, and so-called “patent trolls,” have significantly outpaced those for practicing entities.³ This issue is particularly pronounced in the computer hardware and electronics, business and computer services, and software industries.⁴

Once infringement of a valid patent has been established, the court must determine remedies. Patent damages are compensatory in nature and can take the form of either lost profits or reasonable royalties.⁵ A patentee may recover lost profit damages if it can show that but for the alleged infringement, it would have earned those additional profits.⁶ If the patentee is unable to meet the stringent requirements for lost profit damages, it can

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1. *See* CHRIS BARRY, RONAN ARAD, LANDAN ANSELL & EVAN CLARK, PRICEWATERHOUSECOOPERS, 2013 PATENT LITIGATION STUDY: BIG CASES MAKE HEADLINES, WHILE PATENT CASES PROLIFERATE 6 (2013) [hereinafter Patent Litigation Study].

2. *See id.* at 7–8.

3. *See id.* at 7. From 1995 to 2000 the median award for NPEs was \$4.6 million, while it was \$5.7 million for practicing entities. But from 2007 to 2012, the tables had turned with NPE median awards rising to \$7.2 million and practicing entity median awards dropping to \$3.8 million.

4. *See id.* at 16, chart 6.

5. *See* Lucent Techs., Inc. v. Gateway, Inc., 580 F.3d 1301, 1324 (Fed. Cir. 2009) (determining that the two alternative categories of compensatory damages for patent infringement were lost profits and a reasonable royalty the patentee would have received from “arms-length bargaining”).

6. *See, e.g.*, King Instruments Corp. v. Perego, 65 F.3d 941, 952 (Fed. Cir. 1995).

pursue a reasonable royalty instead. The federal statute dictates that “[u]pon finding for the claimant the court shall award the claimant damages adequate to compensate for the infringement, but in no event *less than a reasonable royalty*.”⁷

Reasonable royalties are the most common form of damages, accounting for eighty-one percent of the damages awards over the last six years.⁸ This reflects the trend of NPEs filing patent actions, as NPEs are ineligible for lost profits damages.⁹ Unfortunately, the standards for determining a reasonable royalty remain uncertain. Although the Federal Circuit has attempted to clarify reasonable royalty case law with a string of decisions in recent years,¹⁰ district courts have interpreted these decisions in contrary and diverging ways.¹¹ This situation is further complicated when dealing with multi-component products where the patented invention only comprises a small part of the end product. For example, the Central Processing Unit (“CPU”) of a smart phone or tablet computer could implicate hundreds of patents by itself. How should damages be calculated when the infringed patent is merely one out of hundreds or thousands of patents in the finalized product? Should the damages be based on the value of the whole product or just the smallest separable component that uses the infringed patent? If the smallest component still uses multiple patents, should the court attempt to further apportion the patent’s contribution?

Commentators have debated various approaches for tackling the aforementioned problems. This Note provides a background to reasonable royalties and the current state of the law in this area, and argues that reasonable royalty calculations must reflect apportionment principles depending on the situation. Part I provides a brief background of reasonable royalties and discusses the historical framework of the twin subtopics within reasonable royalties: the Entire Market Value Rule and apportionment. Part II focuses on recent Federal Circuit decisions that attempt to clarify this area of law and the divergent interpretation and application found in various

7. 35 U.S.C. § 284 (2012) (emphasis added).

8. See Patent Litigation Study, *supra* note 1, at 11.

9. See *id.* at 11 (finding that if NPE results were omitted, the proportion of damages awarded through reasonable royalties decreases about six percent).

10. See, e.g., *LaserDynamics, Inc. v. Quanta Computer, Inc.*, 694 F.3d 51 (Fed. Cir. 2012); *Uniloc USA, Inc. v. Microsoft Corp.*, 632 F.3d 1292 (Fed. Cir. 2011); *Lucent*, 580 F.3d 1301; *infra* Section II.A.

11. See, e.g., *Dynetix Design Solutions, Inc. v. Synopsys, Inc.*, No. 11–05973, 2013 WL 4538210 (N.D. Cal. Aug. 22, 2013); *Summit 6 LLC v. Research in Motion Corp.*, No. 3:11-cv-367, (N.D. Tex. June 26, 2013); *Internet Machs. LLC v. Alienware Corp.*, No. 6:10-cv-23, 2013 WL 4056282 (E.D. Tex. June 19, 2013).

district courts. Part II also introduces two methods that parties to litigation have recently proposed to determine a reasonable royalty: the Nash Bargaining Solution (“NBS”) and conjoint analysis. Part III analyzes how these recent cases and tools affect the reasonable royalty calculation, while Part IV proposes a general framework to distinguish among different classes of cases.

I. BACKGROUND

A. PATENT DAMAGES: THE DISTINCTION BETWEEN LOST PROFITS AND REASONABLE ROYALTIES

The relevant federal statute on patent damages states that the patentee will be awarded “damages adequate to compensate for the infringement, but in no event less than a reasonable royalty.”¹² This statute effectively provides two types of patent damages for patentees: lost profits and reasonable royalties.¹³ Lost profits are available for patentees who can prove they would have made the sales had the infringer not violated their patent rights while reasonable royalties provide a minimum level of compensation for patentees who cannot meet the bar for lost profits.¹⁴ A third category of damages, established royalties, exists when the market has objectively priced the patent.¹⁵ But established royalties are difficult to prove and are rarely used.¹⁶ Instead, this Section will detail the differences between lost profits and reasonable royalty damages, and explain the circumstances when one type of damages is appropriate over the other.

1. *Lost Profits*

A patent allows its owner to exclude competitors from the market place. Lost profits give the patentee the monetary compensation it would have had if the infringer had never infringed, essentially fulfilling the purpose of the

12. 35 U.S.C. § 284.

13. See Mark A. Lemley, *Distinguishing Lost Profits From Reasonable Royalties*, 51 WM. & MARY L. REV. 655 (2009).

14. See, e.g., *Panduit Corp. v. Stahl Bros. Fibre Works, Inc.*, 575 F.2d 1152, 1157 (6th Cir. 1978) (finding that a patent owner is entitled to a reasonable royalty when lost profits cannot be proved).

15. See Michael J. Chapman, *Averting A Collision Over Patent Settlement Licenses*, LAW360 (Apr. 5, 2012, 1:31 PM), http://www.analysisgroup.com/uploadedFiles/Publishing/Articles/Averting_Collision_Over_Patent_Settlement_Licenses.pdf; see also *Rude v. Westcott*, 130 U.S. 152, 165 (1889) (providing that an established royalty must (1) be paid before the alleged infringement, (2) be paid by a sufficient number of parties such that the royalty can be accepted as reasonable, and (3) be uniform).

16. See Chapman, *supra* note 15.

patent.¹⁷ Patentees who pursue lost profit damages must successfully prove they would have been able to exploit the monopolistic power conferred by the patent under the standard set by the Federal Circuit in *Panduit*.¹⁸ In *Panduit*, the court provided a four factor test to determine whether lost profit damages were appropriate. The patentee must demonstrate: (1) demand for the patented product, (2) absence of acceptable non-infringing substitutes, (3) manufacturing capability to exploit the demand, and (4) the amount of profit the patentee would have made.¹⁹

However, lost profits only comprised thirty-three percent of damages awarded from 2007 to 2012 and only twenty-six percent from 2001 to 2006.²⁰ This is partly explained by the fact that non-practicing entities generally do not qualify for lost profit damages because they have no manufacturing capability and are not in direct competition with the infringer. Furthermore, many competitors are also unable to attain lost profit damages because of the difficulty of satisfying the *Panduit* factors, in addition to proving the lack of any mitigating factors.²¹ For example, courts have refused to award lost profits when the patentee could not present sufficient evidence to separate profits from costs.²² Courts have also lessened lost profit damages by considering non-infringing alternatives and the likelihood of divided profits.²³

2. Reasonable Royalties

If the patentee cannot receive lost profits, reasonable royalties are available.²⁴ Unlike lost profits, which seek to award patentees the entire monopoly value of their patents,²⁵ reasonable royalties are meant to provide the patentee with a market-dictated rate.²⁶ Because patentees in the reasonable royalty context are deemed unable to capitalize on the exclusive nature of their patents, they would be overcompensated if the courts were to award them profits they would not have captured without the infringement.²⁷ Instead, the infringer would have paid the patentee a licensing fee to use the

17. Lemley, *supra* note 13, at 657.

18. *Id.*

19. *Panduit*, 575 F.2d at 1156.

20. Patent Litigation Study, *supra* note 1, at 11.

21. Michael A. Greene, *All Your Base Are Belong to Us: Towards an Appropriate Usage and Definition of the "Entire Market Value" Rule in Reasonable Royalties Calculations*, 53 B.C. L. REV. 233, 238–39 (2012).

22. *Panduit*, 575 F.2d at 1157.

23. Greene, *supra* note 21, at 238–39.

24. *Panduit*, 575 F.2d at 1157.

25. Greene, *supra* note 21, at 238.

26. Lemley, *supra* note 13, at 661.

27. *See* Greene, *supra* note 21, at 239–41.

patent-at-issue, while retaining a portion of the profit for itself.²⁸ This division of profits through a royalty is the patentee's rightful position, absent infringement.

Although the prototype of a reasonable royalty received Supreme Court approval in 1866,²⁹ some uncertainty remained as to whether reasonable royalties were a proper form of patent damages.³⁰ Then in 1915, the Supreme Court firmly stated that if an established royalty were not available, the patentee could offer evidence of the patent's value by considering what a reasonable royalty would have been.³¹ Reasonable royalties were subsequently added to the patent statute in 1922,³² with the current language added to the Patent Act in 1952.³³

The most common framework for determining a reasonable royalty was set forth in the seminal case of *Georgia-Pacific Corp. v. United States Plywood Corp.*³⁴ In that case, the court enumerated fifteen factors that it held relevant in determining the reasonable royalty award for the infringer's actions.³⁵ These factors are now ubiquitously known as the *Georgia-Pacific* factors, and some have deemed them the "gold standard" of reasonable royalty calculations.³⁶ Also of note, *Georgia-Pacific* advocated the use of the

28. See Lemley, *supra* note 13, at 661.

29. See *Suffolk Co. v. Hayden*, 70 U.S. 315 (1865) (allowing the patentee to present "general evidence" of the value of the patent-at-issue to allow the jury to approximate a royalty when there was no established patent or license fee).

30. See Eric E. Bensen & Danielle M. White, *Using Apportionment to Rein in the Georgia-Pacific Factors*, 9 COLUM. SCI. & TECH. L. REV. 1, 25–26 (2008).

31. *Dowagiac Mfg. Co. v. Minn. Moline Plow Co.*, 235 U.S. 641, 648 (1915) (holding that "it was permissible to show the value by proving what would have been a reasonable royalty" where there was no way of proving lost sales or an established royalty).

32. See Bensen & White, *supra* note 30, at 26–27 (explaining that the statute allowed damages of "a reasonable sum as profits or general damages for infringement").

33. 35 U.S.C. § 284 (2012).

34. 318 F. Supp. 1116 (S.D.N.Y. 1970).

35. See *id.* at 1120. The fifteen factors are: (1) royalties the patentee receives for licensing the patent in suit, (2) rates the licensee pays for other comparable patents, (3) the exclusivity and restriction terms, (4) the Licensor's policy to maintain patent monopoly by not licensing the invention to others, (5) the commercial relationship between the two parties, (6) effect of selling the patented specialty in promoting sales of other products, (7) duration of patent and term of license, (8) established profitability of the products made under the patent, (9) advantages of the patented component over old components, (10) the nature of the patented invention, (11) the extent to which the infringer has used the invention, (12) the portion of profit customarily allowed for use of the invention, (13) the portion of profit attributable to the invention, (14) expert testimony, and (15) outcome from hypothetical arm's length negotiation at the time of infringement.

36. See Daralyn J. Durie & Mark A. Lemley, *A Structured Approach to Calculating Reasonable Royalties*, 14 LEWIS & CLARK L. REV. 627, 628 (2010).

“hypothetical negotiations” framework to approximate a reasonable royalty.³⁷ This framework asks how much a person would be willing to pay to use the patent-at-issue through a hypothetical negotiation between the patentee and infringer at the time of infringement, presuming both parties know everything the other side knows.³⁸ Additionally, the patent is presumed to be both infringed and valid.³⁹ Implicit in this exercise is the fact that the licensee must still be able to make a reasonable profit from use of the patent.⁴⁰

One of the most pressing concerns facing patent litigation that a reasonable royalties calculation seeks to address is royalty stacking.⁴¹ Royalty stacking refers to a situation where a single multi-component product infringes on multiple patents and is subsequently burdened with multiple royalties.⁴² This becomes a very serious problem if each royalty is overcharged. At first glance, a patentee being compensated \$0.11 per unit when the appropriate royalty should have been \$0.10 per unit does not appear catastrophic. But in the consumer electronic and telecommunication industries, a single product may read on thousands of patents. The cumulative effect of potentially overcompensating thousands of patentees represents a crushing cost for producers and stifles innovation.⁴³ In fact, the aggregate costs of the royalties may exceed the value of the product, potentially pushing the infringer out of the market entirely.⁴⁴

B. STANDARD FOR EVIDENCE

In any discussion of reasonable royalties, it is important to remember that all analyses and models are subject to standards of evidence. Expert testimony is factor fourteen of the *Georgia-Pacific* factors⁴⁵ and some of the

37. See *Georgia-Pacific*, 318 F. Supp. at 1121.

38. See *id.*

39. See Lemley, *supra* note 13, at 669.

40. See *Georgia-Pacific*, 318 F. Supp. at 1122 (stating that the rule “contemplate[s] a marshaling of all of the pertinent facts which, like cards dealt face up, are for all to see”); William Choi & Roy Weinstein, *An Analytical Solution to Reasonable Royalty Rate Calculations*, 41 IDEA 49, 63 (2001) (“A reasonable royalty assumes that, after payment, the infringer will be left with a profit.”).

41. See Mark A. Lemley & Carl Shapiro, *Patent Holdup and Royalty Stacking*, 85 TEX. L. REV. 1991, 1992 (2007); Brian J. Love, *Patentee Overcompensation and the Entire Market Value Rule*, 60 STAN. L. REV. 263, 280–81 (2007).

42. See Lemley & Shapiro, *supra* note 41, at 1993.

43. See *id.* at 2013.

44. See *Golight, Inc. v. Wal-Mart Stores Inc.*, 355 F.3d 1327, 1338 (Fed. Cir. 2004) (internal quotation marks omitted) (finding that “there is no rule that a royalty be no higher than the infringer’s net profit margin” and affirming a reasonable royalty of \$31.80 per unit, despite the infringer forecasting a profit of \$8 per unit).

45. *Georgia-Pacific*, 318 F. Supp. at 1120.

fiercest litigation in patent infringement cases revolves around the admission of expert testimony for calculating damages.⁴⁶ In order for expert testimony to be admitted, it must meet the standard set by the Supreme Court in *Daubert v. Merrell Dow Pharmaceuticals, Inc.*⁴⁷ Likewise, any royalty calculation method will stand if it is sufficiently supported by the facts of the case. For example, in *Energy Transportation Group, Inc. v. William Demant Holding A/S*, the Federal Circuit upheld use of the twenty-five-percent rule, which was famously prohibited as a rule of thumb in *Uniloc*,⁴⁸ when it was only a factor in determining the final award and its usage was supported by evidence.⁴⁹

In *Daubert*, the Supreme Court gave the district courts the responsibility to act as “gatekeepers” in assessing the reliability of expert testimony.⁵⁰ Under this mandate, trial judges are tasked with ensuring that expert testimony is both relevant to the case and is supported by a “reliable foundation.”⁵¹ The Court provided a non-definitive list of factors it deemed relevant in determining whether an expert’s methodology is “scientifically valid.”⁵² These factors included whether the theory could be empirically tested,⁵³ whether the theory has been subject to peer review or publication,⁵⁴ the known or potential error rate,⁵⁵ the “existence and maintenance of standards controlling the technique’s operation,”⁵⁶ and “general acceptance” of the theory.⁵⁷

46. See, e.g., *Oracle Am., Inc. v. Google, Inc.*, 798 F. Supp. 2d 1111 (N.D. Cal. 2011); *Suffolk Techs. LLC v. AOL Inc.*, No. 1:12cv625 (E.D. Va. Apr. 12, 2013); *Mformation Techs., Inc. v. Research in Motion Ltd.*, No. 08–04990, 2012 WL 1142537 (N.D. Cal. Mar. 29, 2012).

47. See *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579 (1993).

48. *Uniloc USA, Inc. v. Microsoft Corp.*, 632 F.3d 1292, 1315 (Fed. Cir. 2011).

49. *Energy Transp. Grp., Inc. v. William Demant Holding A/S*, 697 F.3d 1342, 1356 (Fed. Cir. 2012).

50. *Daubert*, 509 U.S. at 589.

51. *Id.* at 579, 584–87.

52. *Id.* at 592–93.

53. *Id.* at 593 (“Ordinarily, a key question to be answered in determining whether a theory or technique is scientific knowledge that will assist the trier of fact will be whether it can (and has been) tested.”).

54. *Id.* (reasoning that “submission to the scrutiny of the scientific community is a component of good science, in part because it increases the likelihood that substantive flaws in methodology will be detected”).

55. *Id.* at 594.

56. *Id.*

57. *Id.* (reasoning that “widespread acceptance” can be a factor in favor of admissibility while a technique with only “minimal support within the community” may be viewed skeptically).

In the context of patent damages, *Daubert* challenges typically center on an expert's qualifications and the quality of an expert's analysis.⁵⁸ A court may look to an expert's education and experience to determine whether he or she is properly qualified, while the reliability of an expert's analysis is evaluated by determining whether it properly applies the accepted methodology.⁵⁹ Common issues with the reliability of expert testimony include misuse of the *Georgia-Pacific* factors and adoption of an incorrect hypothetical negotiation date.⁶⁰ Testimony that fails the *Daubert* standard is excluded as inadmissible.

C. THE ENTIRE MARKET VALUE RULE AND APPORTIONMENT

Because reasonable royalties theoretically split the profit between the infringer and patentee, damages based on such a royalty should be less than lost profit awards. This distinction makes sense when applied to NPEs and other entities that are only seeking a licensing fee from their patents. However, given the high standards required for lost profit awards, there will be competitors who can only resort to reasonable royalties and will be undercompensated. This has led to “doctrinal creep” such that courts improperly imported lost profit concepts into reasonable royalties analysis in an effort to increase reasonable royalty awards.⁶¹ Chief among these is the Entire Market Value Rule (“EMVR”).

1. *Entire Market Value Rule*

The EMVR permits a patentee to recover damages based on the market value of a product containing several features, but where the patent-at-issue only covers one of those features and that feature forms the basis for customer demand.⁶² This restores the patentee to its rightful position because absent infringement, the patentee could have made its own multi-component product and captured those sales.⁶³ From this description, it is clear that the EMVR was originally designed for use in the lost profit context, as parties

58. See WILLIAM C. ROOKLIDGE, MARTHA K. GOODING, PHILIP S. JOHNSON & MALLUN S. YEN, COMPENSATORY DAMAGES ISSUES IN PATENT INFRINGEMENT CASES, 29–30 (2011).

59. See *id.* at 30.

60. See *id.*

61. See Lemley, *supra* note 13, at 662–64; Patricia Dyck, *Beyond Confusion—Survey Evidence of Consumer Demand and the Entire Market Value Rule*, 4 HASTINGS SCI. & TECH. L.J. 209, 214 (2012); Greene, *supra* note 21, at 245.

62. See, e.g., *Rite-Hite Corp. v. Kelley Co., Inc.*, 56 F.3d 1538, 1549 (Fed. Cir. 1995).

63. See Greene, *supra* note 21, at 241.

seeking reasonable royalties are presumed to be unable to fully capitalize on the demand for the patent.⁶⁴

Rite-Hite Corp. v. Kelley Co., Inc. provided the contemporary version of the EMVR and expanded its use to reasonable royalty cases.⁶⁵ Some scholars have speculated that this expansion occurred due to the difficult evidentiary burden on a patentee in proving lost profits.⁶⁶ Courts, worried about undercompensating patentees who could not prove lost profits, added “kickers” to reasonable royalty awards, sometimes through the EMVR.⁶⁷ The EMVR increases the royalty base, thereby increasing the reasonable royalty. Mathematically, the choice of a larger or smaller base is of no consequence because it can be offset by a smaller or larger rate. Regardless of whether a one-percent rate is applied to \$100 or a twenty-percent rate is applied to \$5, the resulting royalty payment is \$1. However, it is difficult for the trier of fact to arrive at a sufficiently low rate if the overall product is too far removed from the patent component.⁶⁸ For example, a patent relating to the lens of an LED is only a small component of the LED, which in turn is itself a component of an LCD screen, which might form a component of a computer or smart phone. If the value of the computer or smart phone forms the base, it would be very difficult for the trier of fact to determine a reasonable royalty rate.⁶⁹ The appropriate rate might be 0.0001 percent but the patentee could make the case that a 0.1 percent is reasonable because it is such a small number. However, a 0.1 percent royalty would be one thousand times more than what the correct rate is.

Use of the EMVR has been heavily criticized.⁷⁰ Some commentators have argued that a patent is *never* the sole driver behind a product’s value.⁷¹ These commentators note that contributions to the patent’s value may stem from other patents or from the infringer’s efforts in manufacturing and marketing the product.⁷² Specific to reasonable royalties, the EMVR is inappropriate because patentees seeking reasonable royalty awards are unable to make the

64. See Lemley, *supra* note 13, at 660.

65. *Rite-Hite*, 56 F.3d at 1549.

66. See, e.g., Lemley, *supra* note 13, at 662–663; Greene, *supra* note 21, at 245; Amy L. Landers, *Let the Games Begin: Incentives to Innovation in the New Economy of Intellectual Property Law*, 46 SANTA CLARA L. REV. 307, 361–62 (2006).

67. See Lemley, *supra* note 13, at 662–663.

68. See SUZANNE MICHEL ET AL., FTC, THE EVOLVING IP MARKETPLACE: ALIGNING PATENT NOTICE AND REMEDIES WITH COMPETITION 210–11 (2011).

69. See *id.*

70. See, e.g., MICHEL ET AL., *supra* note 68, at 211 (recommending that courts eliminate the EMVR because it is irrelevant); Lemley, *supra* note 13, at 663.

71. See Lemley, *supra* note 13, at 663.

72. *Id.*

sale that captures the entire market value of the product.⁷³ Additionally, the EMVR of reasonable royalties is not the same EMVR of lost profits. Application of the EMVR merely expands the royalty base to the entire product in reasonable royalties analysis while a true application of the EMVR would award all profits from an infringing multi-component product to the patentee.⁷⁴ This would be the equivalent of a one-hundred-percent royalty base with a one-hundred-percent rate. However, the EMVR in reasonable royalties analysis allows the royalty base to be one hundred percent of total profits while the royalty rate is set at a some percentage less than one hundred percent.⁷⁵

2. *Apportionment*

No discussion of the EMVR is complete without mentioning apportionment, a closely related concept. Apportionment seeks to limit a patentee's damages to the contributed value of the patent.⁷⁶ This principle is intuitive: if patentees were overcompensated relative to value of the contribution from their patent, the aggregate royalties from components would be greater than the value of the product itself. Under these circumstances, there is no economic incentive for a rational entity to use the patent. Apportionment can also address the modern concern of royalty stacking.⁷⁷ When damages are properly apportioned, aggregate costs are kept in check by the simple fact that the contributions of each patent cannot be found to exceed the value of the product.

Apportionment has roots in *Seymour v. McCormick*, a Supreme Court decision from 1853.⁷⁸ In that case, the Court rejected a jury instruction that would have allowed a patent for an improvement to recover the same damages as a patent for the entire device.⁷⁹ In 1884, the Court first recited the basic rule for apportionment in *Garretson v. Clark*, holding that the patentee must "separate or apportion the defendant's profits and the patentee's damages between the patented feature and the unpatented features."⁸⁰ Although there were many Supreme Court decisions addressing

73. *See id.*

74. *See* Greene, *supra* note 21, at 255–56.

75. *See id.* at 256 (proposing that such a rule be called the "entire market base rule" to differentiate it from the EMVR).

76. *See* Bensen & White, *supra* note 30, at 3.

77. *See* Damien Geradin & Anne Layne-Farrar, *Patent Value Apportionment Rules for Complex, Multi-Patent Products*, 27 SANTA CLARA COMPUTER & HIGH TECH. L.J. 763, 766 (2011).

78. *Seymour v. McCormick*, 57 U.S. 480 (1854).

79. *Id.* at 485–88.

80. *Garretson v. Clark*, 111 U.S. 120, 121 (1884).

apportionment in the late nineteenth and early twentieth centuries, very few modern cases broached the topic until recently.⁸¹ However, with the advent of complicated multi-component products, apportionment has made a comeback.⁸²

II. RECENT CASE LAW AND NEW TECHNIQUES

Due to increasing lawsuits by NPEs and bigger patent damages awards, especially in the high-tech field,⁸³ several recent decisions have addressed the EMVR, apportionment, and reasonable royalties. Starting in 2009, the Federal Circuit released a string of opinions limiting the use of EMVR and reestablishing the apportionment requirement.⁸⁴ The courts have also addressed the use of new methodologies for calculating reasonable royalties, including the Nash bargaining solution and conjoint analysis.⁸⁵

A. RECENT CASE LAW

1. *Cornell University v. Hewlett-Packard Co.*

Although *Cornell University v. Hewlett-Packard Co.* was not a Federal Circuit case, it was presided over by Chief Judge Rader of the Federal Circuit sitting by designation in the Northern District of New York, and it provided the foundation for a new discussion on apportionment. Cornell's patent claimed technology that issued multiple out-of-order computer processor instructions simultaneously, rather than sequentially.⁸⁶ This invention was not tied to the entire computing system; instead, the patent-at-issue read on one component of the instruction reorder buffer, which was only one component of a computer processor, which was one component of a CPU module, which was part of a brick, which was a part of a server.⁸⁷ Cornell's damages expert initially testified that reasonable royalties should be calculated using Hewlett-

81. See Bensen & White, *supra* note 30, at 9, 21.

82. See *infra* Section II.A.1.

83. See Patent Litigation Study, *supra* note 1, at 7, 16.

84. See, e.g., *LaserDynamics, Inc. v. Quanta Computer, Inc.*, 694 F.3d 51 (Fed. Cir. 2012); *Uniloc USA, Inc. v. Microsoft Corp.*, 632 F.3d 1292 (Fed. Cir. 2011); *Lucent Techs., Inc. v. Gateway, Inc.*, 580 F.3d 1301 (Fed. Cir. 2009).

85. See, e.g., *TV Interactive Data Corp. v. Sony Corp.*, 929 F. Supp. 2d 1006 (N.D. Cal. 2013); *Suffolk Techs. LLC v. AOL Inc.*, No. 1:12cv625, (E.D. Va. Apr. 12, 2013); *Information Techs., Inc. v. Research in Motion Ltd.*, No. C 08-04990, 2012 WL 1142537 (N.D. Cal. Mar. 29, 2012); *Oracle Am., Inc. v. Google, Inc.*, 798 F. Supp. 2d 1111 (N.D. Cal. 2011).

86. *Cornell Univ. v. Hewlett-Packard Co.*, 609 F. Supp. 2d 279, 283 (2009).

87. *Id.*

Packard's earnings from its entire servers and workstations.⁸⁸ Because Cornell did not offer evidence to link consumer demand for servers to the patent, Chief Judge Rader excluded testimony that the entire market value of Hewlett-Packard's servers should be the royalty base.⁸⁹ Cornell's expert subsequently reduced the royalty base from the servers to the next largest tier of products, the CPU bricks.⁹⁰ The jury agreed with the expert and awarded damages of \$184 million.⁹¹ Chief Judge Rader objected to the overly broad royalty base, stating that Cornell had "proceeded to attempt to show economic entitlement to damages based on technology beyond the scope of the claimed invention."⁹² In a post-trial motion, Chief Judge Rader reduced the damages award to \$53 million by using the "uncontroverted" royalty rate of 0.8 percent and applying it to the correct royalty base of \$6.7 billion, the value of Hewlett-Packard's processors, rather than the \$23 billion that formed the CPU brick revenue base.⁹³

In addition to limiting use of the EMVR, *Cornell* is significant because it apportioned the royalty base to the "smallest salable infringing unit with close relation to the claimed invention."⁹⁴ By reaffirming the importance of apportionment in calculating reasonable royalty damages, Chief Judge Rader set the stage for the Federal Circuit's subsequent adoption of the "smallest salable infringing unit" requirement.

2. *Lucent Technologies, Inc. v. Gateway, Inc.*

Roughly concurrent with the *Cornell* case, in *Lucent Technologies, Inc. v. Gateway, Inc.*, Microsoft appealed a \$357 million damages award for infringing the Day patent, which allowed users to select dates in a calendar without using a keyboard.⁹⁵ This case began when Lucent filed suit against Gateway, and Microsoft subsequently intervened.⁹⁶

At trial, the jury found that the Microsoft Money, Windows Mobile, and Microsoft Outlook programs infringed the Day patent, and that Microsoft Outlook contributed the vast majority of the damages award.⁹⁷ The court speculated that the award was so high because the jury used an eight percent

88. *Id.* at 284.

89. *Id.*

90. *Id.*

91. *Id.*

92. *Id.* at 284–85.

93. *Id.* at 292.

94. *Id.* at 288.

95. *Lucent Techs., Inc. v. Gateway, Inc.*, 580 F.3d 1301, 1308–09 (Fed. Cir. 2009).

96. *Id.* at 1308.

97. *Id.* at 1309, 1325.

royalty rate with the entire market value of the software.⁹⁸ The Federal Circuit held that Lucent had erroneously invoked the EMVR because there was no evidence that the Day patent formed even a substantial basis of the consumer demand for Outlook.⁹⁹ Indeed, Lucent's expert conceded that there was no evidence anyone had ever bought Outlook because it had a date picker.¹⁰⁰

3. *Uniloc USA, Inc. v. Microsoft Corp.*

In another case involving Microsoft, *Uniloc USA, Inc. v. Microsoft Corp.*, the Federal Circuit addressed the EMVR and the twenty-five percent rule of thumb, a previously commonly used method for calculating the royalty rate.¹⁰¹ Uniloc owned a patent for product registration software to reduce software piracy.¹⁰² A jury found that Microsoft's Office and Windows programs used a similar and infringing Product Activation feature, and awarded Uniloc reasonable royalty damages of \$388 million.¹⁰³ Uniloc's expert had testified that a Product Key was worth anywhere from \$10 to \$10,000.¹⁰⁴ Applying the twenty-five percent rule of thumb, which states that the patent owner receives twenty-five percent of the value of the product, to the lowest value (\$10), he arrived at a baseline royalty rate of \$2.50 per license issued.¹⁰⁵ Multiplying the baseline royalty rate by the 226 million Microsoft Office and Windows products sold, the expert arrived at a reasonable royalty of \$564 million, which he claimed was reasonable because it represented *only* 2.9 percent of Microsoft's gross revenue of Office and Windows.¹⁰⁶

The court made three important decisions in this case. First, the Federal Circuit rejected use of the twenty-five percent rule of thumb as a fundamentally flawed tool in determining a royalty rate because it was an abstract concept without any basis in the facts of the case.¹⁰⁷ Second, the court reiterated that the EMVR can only be used when the entire market value of the accused products is derived from the patented component.¹⁰⁸ The court determined that Uniloc's expert impermissibly introduced evidence of the entire market value of Microsoft's products because the

98. *Id.* at 1336.

99. *Id.* at 1337.

100. *Id.*

101. *Uniloc USA, Inc. v. Microsoft Corp.*, 632 F.3d 1292, 1312–18 (Fed. Cir. 2011).

102. *Id.* at 1296.

103. *Id.* at 1296, 1311.

104. *Id.* at 1311.

105. *Id.*

106. *Id.* at 1311–12.

107. *Id.* at 1315, 1317.

108. *Id.* at 1320.

entire market value of Microsoft Office and Windows did not derive from Uniloc's patent. Third, the court dismissed Uniloc's arguments that the use of the \$19 billion figure was only a check. Uniloc, relying on *Lucent*,¹⁰⁹ argued that it was allowed to use the EMVR of the products as long as the royalty rate was low enough. However, that quote merely expressed the mathematical truism that a larger base can be compensated with a smaller rate in arriving at a similar royalty calculation. As the *Uniloc* court noted, the Supreme Court and Federal Circuit precedents do not allow parties to invoke the EMVR simply when it is paired with a low enough royalty rate.¹¹⁰

Uniloc also illustrates the dangers of juror bias when the EMVR is misapplied. The Federal Circuit noted that “[t]he disclosure that a company has made \$19 billion dollars in revenue from an infringing product cannot help but skew the damages horizon for the jury” and that the “[t]he \$19 billion cat was never put back into the bag.”¹¹¹ Furthermore, Uniloc derided Microsoft's lump-sum theory, which advocated \$7 million in damages, by implying a relationship between the entire market value of the products and the patent, thus making Microsoft's \$7 million figure look comical when compared to the \$19 billion revenue.¹¹² The court characterized this as “a clear derogation of the entire market value rule” and recognized that “Uniloc's derision of Microsoft's damages expert . . . may have inappropriately contributed to the jury's rejection of his calculations.”¹¹³

4. *LaserDynamics, Inc. v. Quanta Computer, Inc.*

More recently, in *LaserDynamics, Inc. v. Quanta Computer, Inc.*, the Federal Circuit adopted Chief Judge Rader's “smallest salable patent-practicing unit” formulation from *Cornell*.¹¹⁴ In this case, the plaintiff LaserDynamics patented a method for identifying the type of optical disc inserted into an optical disc drive (“ODD”).¹¹⁵ LaserDynamics claimed Quanta actively induced infringement of its patent by incorporating infringing ODDs into the

109. *Lucent Techs., Inc. v. Gateway, Inc.*, 580 F.3d 1301, 1338–39 (Fed. Cir. 2009) (reasoning that “the base used in a running royalty calculation can always be the value of the entire commercial embodiment, as long as the magnitude of the rate is within an acceptable range”).

110. *Uniloc*, 632 F.3d at 1320.

111. *Id.* at 1320.

112. *See id.* at 1320–21. The decision included a portion of the cross-examination of Microsoft's damages expert, during which Uniloc repeatedly points out that \$7 million is only 0.00003 percent of \$19 billion. *Id.* \$7 million is actually 0.03 percent of \$19 billion. Uniloc's attorney and Microsoft's expert both miscalculated.

113. *Id.* at 1321.

114. *LaserDynamics, Inc. v. Quanta Computer, Inc.*, 694 F.3d 51, 67 (Fed. Cir. 2012).

115. *Id.* at 56–57.

computers it assembled and sold. LaserDynamics initially used the value of the computers as the royalty base. However, the court stated that “it is generally required that royalties be based not on the entire product, but instead on the ‘smallest salable patent-practicing unit,’” in this case, the ODDs.¹¹⁶ By denying LaserDynamics the opportunity to use the EMVR, the Federal Circuit clarified and raised the standard for the EMVR. It is not sufficient that the patented technology be “valuable, important, or even essential” to the product.¹¹⁷ Instead, for the EMVR to apply, the patented technology must be what motivates consumers to purchase the product.¹¹⁸

The court also found that the patentee’s expert’s testimony in arriving at a royalty figure was overly arbitrary and unsupported by any sort of quantitative economic analysis.¹¹⁹ Instead of “alleging a loose or vague comparability between different technologies or licenses,” the court attached strong probative value to actual licenses of the patented technology in determining a reasonable royalty.¹²⁰

5. *The District Court Interpretations*

The “smallest salable patent-practicing” language from *LaserDynamics* has led to various contradictory interpretations in the district courts.¹²¹ Some courts have accepted the argument that *LaserDynamics* allows patentees to calculate a reasonable royalty based on all revenues derived from the smallest salable infringing unit without further apportionment. For example, the court in *Summit 6 LLC v. Research in Motion Corp.* ruled that “using the entire device as the royalty base [was] proper because the device itself [was] ‘the smallest patent-practicing unit.’”¹²² Similarly, the court in *Internet Machines LLC v. Alienware Corp.* found that additional apportionment was unwarranted and the EMVR did not apply where the expert used the smallest salable unit as the royalty base.¹²³

However, other courts have ruled that the EMVR can still apply to the smallest salable patent practicing unit when that unit is made up of multiple

116. *Id.* at 67.

117. *Id.* at 68.

118. *Id.*

119. *Id.* at 69.

120. *Id.* at 79.

121. See Martha K. Gooding, *Reasonable Royalty Patent Damages and the “Smallest Salable Patent-Practicing Unit” Dicta*, 86 PAT., TRADEMARK & COPYRIGHT J. (BNA) 771 (Aug. 9, 2013).

122. *Summit 6 LLC v. Research in Motion Corp.*, No. 3:11-cv-367, at *19–20 (N.D. Tex. June 26, 2013).

123. *Internet Machs. LLC v. Alienware Corp.*, No. 6:10-cv-23, 2013 WL 4056282, at *24–25 (E.D. Tex. June 19, 2013).

components. In *Dynetix Design Solutions, Inc. v. Synopsis, Inc.*, the court correctly declared *LaserDynamics* supported the “premise that an apportionment is still required even where there the accused product is the smallest salable unit or where whatever the smallest salable unit is it is still a multi-component product encompassing non-patent related features.”¹²⁴ This reading of *LaserDynamics* is the more logical of the two as it is the one that follows the principle behind the EMVR. There is no reason the patentee should receive reasonable royalties calculated on the entire market value of the smallest salable patent practicing unit without apportionment if the patented feature did not form the basis of consumer demand for the smaller base. The patentee could end up being compensated for components it did not invent, a result that extends the monopolistic power of the patent far beyond its scope. If apportionment only required limiting the royalty base to the smallest salable patent practicing unit, then the EMVR would be violated with respect to the smaller unit. Therefore, the interpretation of *LaserDynamics* offered by the *Dynetix* court is correct: apportionment is still required even where the accused product is the smallest salable unit.

B. NEW TOOLS IN REASONABLE ROYALTY CALCULATIONS

Some have criticized the *Georgia-Pacific* factors for being too malleable and subject to expert manipulation.¹²⁵ Similarly, courts have long complained that calculating a reasonable royalty “is a difficult judicial chore, seeming often to involve more the talents of a conjurer than those of a judge.”¹²⁶ In recent years, parties have attempted to introduce new methods of calculating reasonable royalties that they claim are more rigorous, scientific, and grounded in economics.¹²⁷ Two of the most prominent are the Nash bargaining solution and conjoint analysis.

1. Nash Bargaining Solution

The Nash bargaining solution (“NBS”) is meant to find an outcome that is most beneficial for both parties in a two party bargaining scenario, known as the Nash bargaining game.¹²⁸ In reasonable royalty calculations, the parties

124. *Dynetix Design Solutions, Inc. v. Synopsis, Inc.*, No. C 11-05973 (N.D. Cal. Aug. 22, 2013).

125. See, e.g., Thomas F. Cotter, *Four Principles for Calculating Reasonable Royalties in Patent Infringement Litigation*, 27 SANTA CLARA COMPUTER & HIGH TECH L.J. 725, 730 (2011).

126. *Fromson v. Western Litho Plate & Supply Co.*, 853 F.2d 1568 (1988).

127. See Choi & Weinstein, *supra* note 40, at 49.

128. See S. Christian Platt & Bob Chen, *Recent Trends and Approaches in Calculating Patent Damages: Nash Bargaining Solution and Conjoint Surveys*, 86 PAT., TRADEMARK & COPYRIGHT J. (BNA) 909 (Aug., 30, 2013); Choi & Weinstein, *supra* note 40, at 56.

must be able to estimate: (1) each party's disagreement profits (the profit each party would receive if the negotiation fails) and (2) the total profits from licensing.¹²⁹ If both parties have equal bargaining power such that neither can profit without entering into a license agreement, then each party's disagreement profits are both zero and the solution is to split the profits evenly.¹³⁰

While the NBS is attractive in theory, it has received a lukewarm reception in practice. Some patentees have attempted to use the NBS as a replacement for the twenty-five percent rule of thumb, while others have used it as a benchmark to check against a reasonable royalty determined through the *Georgia-Pacific* factors.¹³¹ Whether a court allows expert testimony about the NBS is largely dependent on whether the expert is relying on NBS as an arbitrary rule of thumb or whether the facts of the case actually support application of the NBS. For example, Judge Alsup criticized use of the NBS in *Oracle America, Inc. v. Google Inc.* by comparing it to the twenty-five percent rule of thumb and stating that “the Nash bargaining solution would invite a miscarriage of justice by clothing a fifty-percent assumption in an impenetrable façade of mathematics.”¹³² Specifically, the court found that the expert did not provide any evidence to show how the NBS assumptions applied in this particular case.¹³³ Similarly, the court in *Suffolk Technologies LLC v. AOL Inc.* ruled that expert testimony on the NBS and the resulting evenly split profits were inadmissible because they did not appear “to be tied to the facts of [the] case.”¹³⁴ However, the court in *Mformation Technologies v. Research in Motion* allowed the expert's testimony regarding the NBS over the infringer's objections that it was essentially a rule of thumb.¹³⁵ The court justified its decision by noting that the NBS was not being relied upon as a stand-alone calculation for reasonable royalties; rather it was merely used to check the reasonableness of a rate determined from the *Georgia-Pacific* factors.¹³⁶ From these cases and others, it appears that the courts will find

129. See Platt and Chen, *supra* note 128. See the Appendix for a detailed description of this derivation.

130. See Choi & Weinstein, *supra* note 40, at 56.

131. See, e.g., *Suffolk Techs. LLC v. AOL Inc.*, No. 1:12cv625, slip op. at 3–5 (E.D. Va. Apr. 12, 2013); *Mformation Techs., Inc. v. Research in Motion Ltd.*, C 08–04990, 2012 WL 1142537 (N.D. Cal. Mar., 29, 2012); *Oracle America, Inc. v. Google, Inc.*, 798 F. Supp. 2d 1111 (N.D. Cal. 2011).

132. *Oracle*, 798 F. Supp. 2d at 1120.

133. *Id.*

134. *Suffolk Techs.*, No. 1:12cv625, slip op. at 4.

135. *Mformation Techs.*, 2012 WL 1142537, at *15–16.

136. *Id.*

expert testimony on the NBS admissible if the expert can tie the NBS to the facts of the case, rather than relying on it as a rule of thumb.

2. *Conjoint Analysis: Consumer Surveys*

Conjoint analysis is a marketing research tool that utilizes consumer surveys and statistical analysis to determine consumer preferences for certain features relative to other features in the same product.¹³⁷ Researchers in marketing and business have used conjoint analysis for over fifty years, and it is currently the most commonly used method of analyzing consumer trade-offs.¹³⁸ Likewise, consumer survey evidence is widely used in trademark law to show confusion.¹³⁹ Recently, conjoint analysis has made its way into patent cases.¹⁴⁰ Although the courts have shown no objection to the concept of using conjoint analysis and survey evidence, the admissibility of such evidence is dependent on how the study was conducted.

A conjoint survey typically identifies important features of a product, called attributes, and different variations within those attributes, called levels.¹⁴¹ For example, toothpaste might have four attributes (brand, taste, fluoride level, and price) and each attribute may have three levels (three different brands, three different flavors, three different fluoride levels, and three different prices). Different combinations are packaged together and consumers are asked to rank the packages. Researchers then run a statistical analysis to determine how each level of each attribute contributes to the overall value of the product, which is called a “part-worth.”¹⁴² This data can then be used to determine the consumer’s willingness to pay (“WTP”) for the level of the attribute, and thus isolate a product feature’s value.¹⁴³

Although this analysis appears relatively simple and scientific, conjoint analysis is somewhat limited. Due to human limitations and combinatorial explosion, conjoint analysis is most useful when only a small set of features are evaluated.¹⁴⁴ Studies have shown consumers cannot make effective

137. See Dyck, *supra* note 61, at 225.

138. See Paul E. Green, Abba M. Krieger & Yoram Wind, *Thirty Years of Conjoint Analysis: Reflections and Prospects*, 31 INTERFACES 56, 56–57 (2001).

139. See Dyck, *supra* note 61, at 219–20.

140. See Oracle Am., Inc. v. Google, Inc., No. C 10–03561, 2012 WL 850705 (N.D. Cal. Mar. 13, 2012); TV Interactive Data Corp. v. Sony Corp., 929 F. Supp. 2d 1006 (N.D. Cal. 2013).

141. See Green, Krieger, & Wind, *supra* note 138, at 58.

142. See Lisa Cameron, Michael Cragg & Daniel McFadden, *The Role of Conjoint Surveys in Reasonable Royalty Cases*, LAW360 (Oct. 16, 2013, 6:37 PM), <http://www.law360.com/articles/475390/the-role-of-conjoint-surveys-in-reasonable-royalty-cases>.

143. See, e.g., *id.*

144. See Dyck, *supra* note 61, at 226.

decisions when faced with more than seven attributes.¹⁴⁵ Additionally, in complex multi-component products such as computers or smartphones, there may be thousands of patents and thus, thousands of different features. The large number of attributes, each with multiple levels, leads to combinatorial explosion. Combinatorial explosion refers to the huge increase in possible combinations of attributes and features due to small increases of attributes and features.¹⁴⁶ Some combinations could be eliminated to present survey respondents with a manageable number of choices; however, manipulating which features to include can lead to that particular feature being preferred in the consumer surveys, simply because the other attractive attributes were not included in the survey.¹⁴⁷

Whether a court admits survey evidence is largely dependent on the methodology used. For example, in *Oracle v. Google*, Judge Alsup rejected Oracle's consumer survey evidence because consumers found thirty-nine features relevant but only seven were included in the survey and no explanation was given for the exclusion of the other thirty-two features.¹⁴⁸ However, the court made clear that its issue was with Oracle's methodology and not consumer surveys in general, noting that "consumer surveys are not inherently unreliable."¹⁴⁹ In contrast, the court in *TV Interactive Data v. Sony* admitted conjoint analysis evidence because the patentee selected components that were similar to the patented components at issue and the analysis was properly founded in fact.¹⁵⁰

III. ANALYSIS

After the string of decisions discussed in Section II.A, it is clear that the rules on apportionment and the EMVR have changed. The Federal Circuit has repeatedly and explicitly limited application of the EMVR to situations where the patent-in-suit drives consumer demand for the product. In light of this limitation on the use of the EMVR, it follows that apportionment now comes in two steps: apportionment of the royalty base and apportionment of the royalty rate.

145. See, e.g., Cameron, Cragg & McFadden, *supra* note 142; Green, Krieger & Wind, *supra* note 138, at 8–9.

146. See Dyck, *supra* note 61, at 226.

147. See *id.*

148. *Oracle America, Inc. v. Google, Inc.*, No. C 10–03561, 2012 WL 850705, at *15–16 (N.D. Cal. Mar. 13, 2012).

149. *Id.*

150. *TV Interactive Data Corp. v. Sony Corp.*, 929 F. Supp. 2d 1006, 1019–20 (N.D. Cal. 2013).

A. ROYALTY BASE

Under *Lucent*, it appeared that the court endorsed the proposition that a patentee could pick anything as the royalty base so long as the magnitude of the rate was appropriate.¹⁵¹ This decision made sense mathematically, but *Uniloc* disclaimed that language due to evidentiary concerns.¹⁵² After *LaserDynamics*, patentees must use the smallest salable patent-practicing unit as the royalty base.¹⁵³ This instruction is straightforward when the patent reads on a discrete component of the multi-component product, such as the microprocessor in *Cornell* or the ODDs in *LaserDynamics*. However, what should the royalty base be if the patent reads on a feature that cannot be isolated to a smaller unit within the product? In these cases, the royalty base might be calculated as the value the patent contributes to the product.¹⁵⁴ This can be defined in a variety of ways, including the value the patent holds over the next-best non-infringing alternative or the cost of a design-around.

Theoretically, the value of a patent is exactly equal to the difference in value the patent provides over the next-best alternative, as no rational actor would pay more than that for use of the invention.¹⁵⁵ Because this limits the patentee's maximum recovery to the contribution its patent made to the product, this analysis embodies apportionment by definition. Under this methodology, parties would be trying to prove the difference between the present value of the profit from using the patent-at-issue and the present value of the next-best alternative,¹⁵⁶ which is essentially the first step of the Nash bargaining solution. Alternatively, the value provided by the patent can be represented by the cost savings that the patent provides over the licensing of a different substitute technology or coming up with a design around.

One recent example of an attempt at using the cost of a design around can be found in *Apple Inc. v. Motorola, Inc.*¹⁵⁷ In that case, Motorola's expert

151. *Lucent Techs., Inc. v. Gateway, Inc.*, 580 F.3d 1301, 1338–39 (Fed. Cir. 2009).

152. *Uniloc USA, Inc. v. Microsoft, Corp.*, 632 F.3d 1292, 1320 (Fed. Cir. 2011).

153. *LaserDynamics, Inc. v. Quanta Computer, Inc.*, 694 F.3d 51 (Fed. Cir. 2012).

154. See Christopher B. Seaman, *Reconsidering the Georgia-Pacific Standard for Reasonable Royalty Patent Damages*, 2010 BYU L. REV. 1661, 1711 (2010).

155. See Cotter, *supra* note 125, at 743 (citing *Grain Processing Corp. v. Am. Maize-Products Co.* 893 F. Supp 1386, 1392–93 (N.D. Ind. 1995), *rev'd mem. on other grounds* 108 F.3d 1392 (Fed. Cir. 1997) (using cost savings in comparison with next-best alternative to estimate a reasonable royalty).

156. See Roy J. Epstein & Alan J. Marcus, *Economic Analysis of the Reasonable Royalty: Simplification and Extension of the Georgia-Pacific Factors*, 85 J. PAT. & TRADEMARK OFF. SOC'Y 555 (2003) (proposing a mathematical model based on the difference in value between the patented technology and the next-best alternative for calculating reasonable royalties).

157. *Apple, Inc. v. Motorola, Inc.*, No. 11-cv-08540, 2012 WL 1959560 (N.D. Ill. May 22, 2012).

testified that a reasonable royalty for Apple's patent, a technology that allowed the toolbar to notify the user with basic information on the state of his device, would be \$100,000.¹⁵⁸ Motorola's expert arrived at this number based on the fact that creating the patented feature had only cost \$67,000 and because one of Motorola's technical experts was able to write a bit of code to bypass Apple's patent in a single afternoon.¹⁵⁹ Although the court excluded this testimony because it was improper to base the design around costs on testimony from a Motorola employee, this case illustrates the possibility of using the cost savings associated with developing a design-around as the base in reasonable royalty calculations. Although the design-around approach has only been successfully applied in the lost profits context thus far, "its logic is equally applicable in the reasonable royalty context" and the Federal Circuit has indicated it might extend this approach to reasonable royalties.¹⁶⁰

However, in reality it may be difficult to determine the difference in present values between the use of the patent-at-issue and the next best non-infringing alternative. There may be problems acquiring accurate data or projections of profitability and cost. Additionally, under the hypothetical negotiation framework, the next best non-infringing alternative must be determined as of the date of infringement. This presents difficulties as the passage of time may skew counterfactual judgments and make one alternative seem trivial or obvious in retrospect. Despite these difficulties, the Federal Circuit has noted that "patent law encourages competitors to design or invent around existing patents"¹⁶¹ and parties have not shied away from using design around costs as an element of their damages analysis.

B. ROYALTY RATE

The dispute between the district courts' interpretations of *LaserDynamics* lies with whether apportioning to the smallest salable patent practicing unit for the royalty base constitutes the entire apportionment step. That is, does the royalty rate also have to account for apportionment? As discussed in Section II.A.5, patentees should only be allowed to invoke the entire market value of the product in calculating reasonable royalties when the patent-at-issue drives consumer demand for the smaller base. Otherwise, patentees could receive damages for features they did not invent. When demand for even the smallest salable unit is not driven by the patent-at-issue, then further

158. *Id.* at *2.

159. *Id.*

160. *See* Seaman, *supra* note 154, at 1713–15.

161. *WMS Gaming, Inc. v. Int'l Game Tech.*, 184 F.3d 1339, 1355 (Fed Cir. 1999).

apportionment is required or else the EMVR would be violated with respect to the smaller unit.¹⁶² This leads to the practical question of how to determine a royalty rate.

The choice of a royalty rate is dependent on the royalty base. This becomes obvious when considering the vastly different possible bases discussed in Section III.A. The royalty rate might be fifty percent if the royalty base is taken to be the incremental profits contributed by the patent, such as when the Nash bargaining solution is employed. However, in situations where the product's revenue is used as the royalty base, a fifty-percent royalty rate would be unimaginable. Therefore, each method of determining a royalty rate must be properly linked to the method of determining the royalty base.

1. *Baseline Percentage*

Traditionally, courts have started from a baseline percentage determined either from comparable licenses or the twenty-five percent rule of thumb, and then adjusted according to the *Georgia-Pacific* factors.¹⁶³ However, with the Federal Circuit's ban on the twenty-five percent rule of thumb, the Nash bargaining solution may become an alternative starting point, if the facts of the case support its use.¹⁶⁴

a) *Comparable Licenses*

Comparable licenses include royalties the patentee receives for licensing the patent-in-suit and rates the licensee pays for use of other comparable patents.¹⁶⁵ Although reasonable arguments could be made for each of these factors to be the starting point in determining a royalty rate, the Federal

162. See *Dynetix Design Solutions, Inc. v. Synopsys, Inc.*, No. C 11-05973, 2013 WL 4538210, at *3 (N.D. Cal. Aug. 22, 2013).

163. See *Uniloc USA, Inc. v. Microsoft Corp.*, 632 F.3d 1291, 1312–14 (Fed. Cir. 2011).

164. See *infra* Section II.B.1.

165. This is encompassed by *Georgia-Pacific* factors one and two. Some commentators have also argued that the average licensing rates in an industry should be the starting point for calculating reasonable royalties. See Atanu Saha & Roy Weinstein, *Beyond Georgia-Pacific: The Use of Industry Norms as a Starting Point for Calculating Reasonable Royalties*, MICRONOMICS, http://www.micronomics.com/articles/intellectualproperty_2.pdf (last visited Feb. 11, 2014). However, the same issues that are present in stereotyping are also present in this analysis. Each patent is unique and each case has its own specific set of facts. Although this approach may work generally, it may not be representative of the patent-at-issue in every case. Furthermore, industry licensing rates may fall under a wide range and the average value may not reflect the circumstances of either the infringer or the patentee.

Circuit has increased the level of scrutiny in assessing whether licenses are truly “comparable.”¹⁶⁶

In *Lucent*, the plaintiff’s expert provided eight comparable licenses that the defendant had agreed to as part of his analysis of the second *Georgia-Pacific* factor.¹⁶⁷ However, under the Federal Circuit’s examination, there was insufficient evidence on the subject matter of the licensing agreements to conclude that the licenses offered by the plaintiff were actually “comparable licenses.”¹⁶⁸ Lucent characterized four of the agreements as “PC-related patents,” as if all patents related to personal computers were comparable.¹⁶⁹ Another supposedly “comparable” license was actually a license for IBM’s entire patent portfolio, the same portfolio that protected IBM’s dominance of the personal computer market back in the 1980s. (Compare this to Lucent’s Day patent, a patent for picking dates).¹⁷⁰

Similarly, in *ResQNet*, the Federal Circuit vacated and remanded a damages award based on comparable licenses the plaintiff had received from other parties, partly because it determined that the licenses were not actually comparable. The plaintiff’s expert based his damages on seven licenses ResQNet had negotiated in the past.¹⁷¹ However, five of the seven licenses did not even mention the patents in suit and were not related to the claimed technology.¹⁷² Therefore, whether any of the aforementioned categories of comparable licenses should be used as a baseline royalty rate in any given case is a highly fact-specific question.

Comparable licenses often provide the best starting points for a reasonable royalty rate. However, parties and courts must look at the circumstances of the comparable license and the claimed technology to ensure that the licenses are actually sufficiently comparable.

b) Nash Bargaining Solution

The Nash bargaining solution calculates the percentage each party should receive of the profits resulting from their collaboration. The Nash bargaining solution arrives at its even profit-splitting by assuming that neither party is able to monetize the patented technology without entering into a license with

166. See *Lucent Techs., Inc. v. Gateway, Inc.*, 580 F.3d 1301, 1327–31 (Fed. Cir. 2009); *ResQNet.com v. Lansa, Inc.*, 594 F.3d 860, 869–72 (Fed. Cir. 2010).

167. *Lucent*, 580 F.3d at 1327–28.

168. *Id.* at 1328.

169. *Id.*

170. *Id.*

171. *ResQNet*, 594 F.3d at 870.

172. *Id.*

the other.¹⁷³ In this situation, both parties have equal bargaining power and there are no disagreement profits. However, this assumption is very rarely true. For example, the patentee could be capable of finding another licensee or manufacturing the product on its own. Similarly, the prospective licensee could substitute a similar technology, use older technology, invest in its own design-around, or turn to other non-infringing alternatives. In these instances, the disagreement profits would not be zero nor would there be equal bargaining power. Therefore, parties seeking to use the Nash bargaining solution framework to arrive at a baseline royalty rate must be able to support their proposed baseline rates with sufficiently convincing evidence.

Furthermore, it is important to remember that the Nash bargaining solution royalty rate must be tied to the Nash bargaining solution base, which is likely *not* the market value of the product. The Nash bargaining solution limits the royalty base to the incremental profits resulting from the licensee and patentee's collaboration. It would be improper to evenly split the value of the product revenue, in effect creating a fifty percent rule of thumb to replace the prohibited twenty-five percent rule of thumb, unless the resulting incremental share is equal to the incremental profit, which is unlikely in multi-component products.

2. *Adjusting the Baseline: Georgia-Pacific and Beyond*

Once a court has selected the baseline royalty rate, the *Georgia-Pacific* factors can be used to shift the royalty rate up or down. These factors are not exclusive, nor are they mandatory.¹⁷⁴ The Federal Circuit has consistently viewed the *Georgia-Pacific* factors as simply “a list of admissible factors informing a reliable economic analysis,” leaving open the possibility of allowing juries to consider relevant information outside the scope of the *Georgia-Pacific* factors.¹⁷⁵ Furthermore, the jury is given the discretion to weigh each factor.¹⁷⁶ Although scholars have debated the relative importance of

173. *See infra* Section II.B.1.

174. *See* *Whitserve, LLC v. Computer Packages, Inc.*, 694 F.3d 10, 31 (Fed. Cir. 2012) (finding that experts are not required to use any or all of the factors); *Micro Chem., Inc. v. Lextron, Inc.*, 317 F.3d 1387, 1393 (Fed. Cir. 2003) (noting that the *Georgia-Pacific* factors were among the factors considered).

175. *Energy Transp. Grp. v. William Demant Holding A/S*, 697 F.3d 1342, 1357 (Fed. Cir. 2012).

176. *See Georgia-Pacific Corp. v. U.S. Plywood Corp.*, 318 F. Supp. 1116, 1120–21 (S.D.N.Y. 1970). (“[T]here is no formula by which these factors can be rated precisely in the order of their relative importance or by which their economic significance can be automatically transduced into their pecuniary equivalent.”).

each factor, the only indispensable factor under apportionment analysis is factor thirteen.¹⁷⁷ Factor thirteen is the apportionment factor and takes into account “the portion of realizable profit attributable to the invention as distinguished from non-patented elements.”¹⁷⁸ As such, courts should separate this factor and give it special deference in determining a reasonable royalty.¹⁷⁹ The following Section identifies other factors in addition to the *Georgia-Pacific* factors that may be relevant in adjusting the royalty rate.

a) Incremental Profit from the Patent-at-Issue

As discussed in Section III.A, a patent is only as valuable as what it is able to contribute over the next-best non-infringing alternative. The next-best alternative can take the form of licensing a replacement technology, coming up with a design-around, or exiting the market.¹⁸⁰ The challenge in evaluating this factor is that in many cases involving complex multi-component products, the incremental profits derived from an infringed patent are difficult to isolate because the patent provides benefits that are only realized when combined with the other components.¹⁸¹ However, royalty awards must reflect only the value of the patent and exclude compensation for non-patented components. Otherwise, the patentee is overcompensated and the inherent balance between monopoly and innovation is upset.

b) Consumer Valuation

Features that are used most often by the consumer or features that consumers value the most are more valuable because they likely tie customers to the product and therefore, should receive a higher royalty rate. This factor is similar to the incremental profit provided by the patent-at-issue because both factors take into account the value attributable to the patent. However, the “value” considered by this factor comes from the consumer’s perspective rather than the infringer’s. This definition of value can be determined through consumer surveys, usage rates of the patented feature, or the general appeal of the feature.

177. See Bensen & White, *supra* note 30; Cotter, *supra* note 125; Saha & Weinstein, *supra* note 165.

178. *Georgia-Pacific*, 318 F. Supp. at 1120.

179. See Bensen & White, *supra* note 30, at 38 (arguing that the apportionment factor should be the threshold question in a reasonable royalty analysis).

180. See John C. Jarosz & Michael J. Chapman, *The Hypothetical Negotiation and Reasonable Royalty Damages: The Tail Wagging the Dog*, 16 STAN. TECH. L. REV. 769, 814 (2013).

181. See Geradin & Layne-Farrar, *supra* note 77, at 768.

Although consumer valuation has not yet been successfully used to exclusively establish a reasonable royalty, it is intuitive that the value consumers attach to patented features should be considered as a factor when determining royalty rates. Apple recently provided an example of an attempt to use consumer valuation to calculate a reasonable royalty in *Apple v. Motorola*.¹⁸² In this case, the patent-at-issue dealt with a notification bar. Apple arrived at its royalty figure by relying on a survey where fifteen percent of those surveyed responded that “appealing features and functions” were among the top five reasons they bought a \$270 Motorola cell phone.¹⁸³ Another four percent of respondents stated that they reviewed notifications every day.¹⁸⁴ Apple’s expert subsequently multiplied the \$270 figure by fifteen percent and four percent and then arbitrarily divided by two to arrive at a running royalty figure of \$0.80 per phone, which the court summarily dismissed.¹⁸⁵ However, while Apple was ultimately unsuccessful in its attempt to use the consumer valuation data to set a royalty base, this case is still illustrative of how consumer valuation could potentially be used as a factor in setting royalty rates. The low number of respondents who use the notifications bar coupled with the vagueness of identifying the notification bar as an “appealing feature and function” would likely be interpreted as factors for decreasing the royalty rate.

IV. PROPOSAL: DECISION-MAKING TREE IN CALCULATING REASONABLE ROYALTIES

The figure below summarizes how parties to litigation should generally approach different situations in the reasonable royalty context. Figure 1 gives more details of each case and which tools are appropriate for that case.

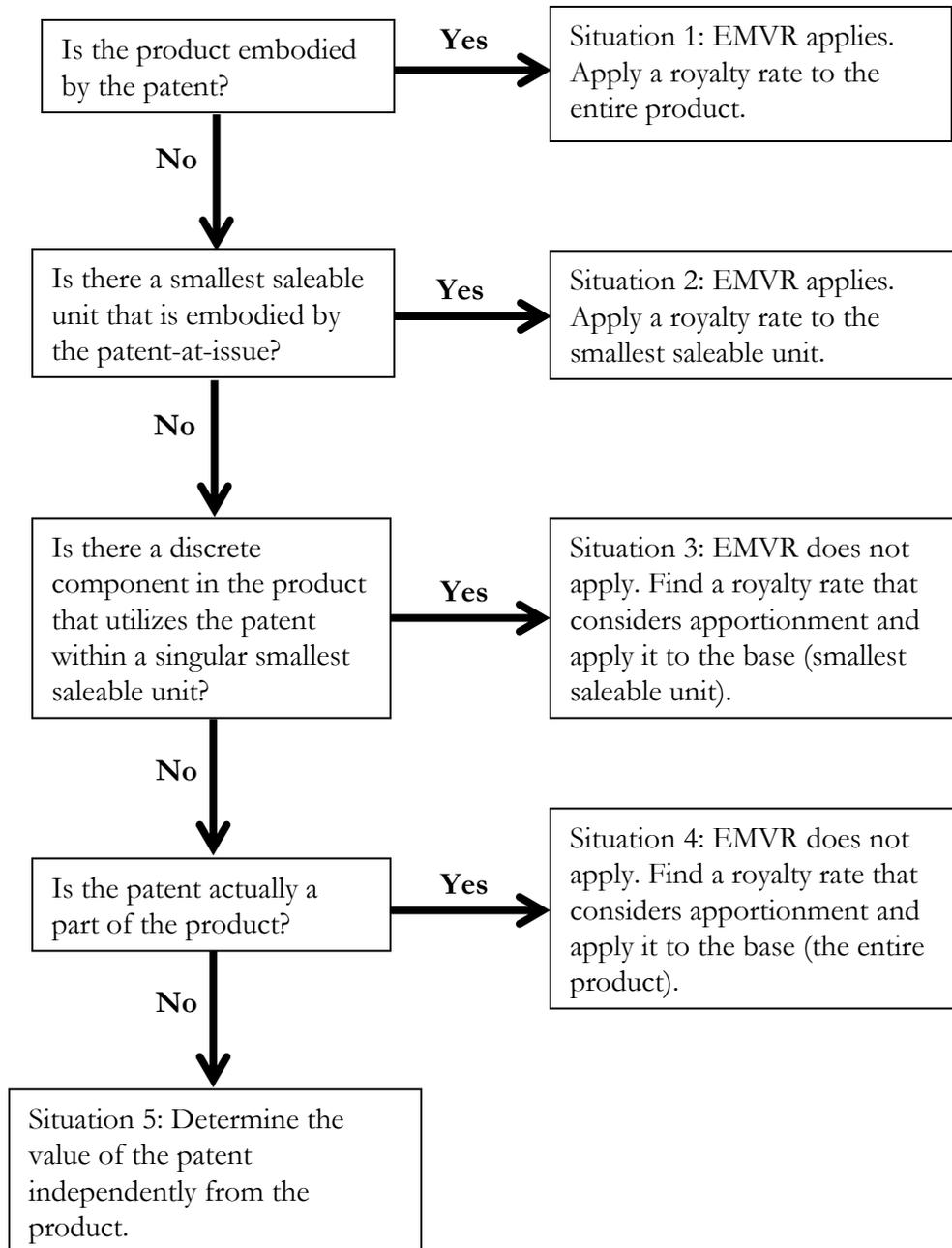
182. *See* Apple, Inc. v. Motorola, Inc., No. 11-cv-08540, 2012 WL 1959560 (N.D. Ill. May 22, 2012).

183. *Id.* at *4.

184. *Id.*

185. *Id.* at *4, *7.

Figure 1: Deciding on a Reasonable Royalty Calculation Methodology



A. SITUATION 1: A PRODUCT WITH A SINGLE PATENT

In a first illustrative situation, imagine a product fully defined by a single patent. An example of this would be a drug that is based on a patented compound.¹⁸⁶ This situation would be a straightforward application of the EMVR: the patentee would be allowed to use the entire market value of the product as the royalty base. Conjoint analysis and consumer surveys may prove useful in determining whether the patented feature actually forms the basis for consumer demand.

The baseline royalty rate can be determined from comparable licenses and later adjusted with the *Georgia-Pacific* factors. If no comparable licenses exist, the Nash bargaining solution could provide a starting point if the assumptions are reflected by the facts of the case. The Nash bargaining solution starting rate would similarly be adjusted by an evaluation of the *Georgia-Pacific* factors. Because the patent drives demand for the product in this situation, there is unlikely to be fears of royalty stacking from other licenses and there should be a presumption of a higher royalty rate. Here, the apportionment factor is not considered because the conclusion that the EMVR applies necessarily means that the entirety of the product is attributable to the patent.

B. SITUATION 2: A PRODUCT WITH A COMPONENT COVERED BY A SINGLE PATENT

In this situation the product contains a component that is both the smallest salable patent-practicing unit and is embodied by a single patent. The facts from *Cornell* potentially fall under this category if the court determined that the patent for the microprocessor function drove demand for the microprocessor.¹⁸⁷ In this case, the EMVR would not apply to the CPU or computer; rather, the patentee would use the microprocessor as the royalty base. The analysis here would be nearly identical to Situation 1, except the royalty base would be limited to the relevant component, the smallest salable patent-practicing unit, of the product.

C. SITUATION 3: A PRODUCT WITH A NON-MARKET DRIVING PATENT

In this situation, a product contains a component that is the smallest salable unit of a product, and a patent covers that smallest salable unit, but the patent does not drive demand for the smallest salable unit. An example

186. This is unlikely to be the case in the high-tech industry as most products read on many patents.

187. *Cornell Univ. v. Hewlett-Packard Co.*, 609 F. Supp. 2d 279, 283–84 (2009).

of this situation would be *Lucent*, where the Day Patent was part of Microsoft Outlook, which was the smallest salable unit of Microsoft Office, but the Day Patent did not drive demand for Microsoft Outlook.¹⁸⁸ Although Microsoft Outlook is a standalone program that appears more “comprehensive” than the smallest salable patent practicing unit should be, Microsoft Office could not be broken down into a smaller component as Microsoft does not sell pieces of Outlook or specific functionalities separately.

The EMVR does not apply in this situation because the patent-at-issue does not drive demand for the smallest salable unit, so further apportionment is needed. If there is a comparable license, then it can form the baseline royalty rate that can be adjusted depending on the *Georgia-Pacific* factors and the additional factors listed in Section III.B.2 Otherwise, the reasonable royalty base should be determined by the incremental benefit provided by the patent: either the cost of capital for the infringer to create a design-around or the cost of procuring a license for a substitute technology. Both valuations can be considered, with the one that has the strongest evidence receiving the most weight. In this case, because the EMVR does not apply, the royalty rate must account for the apportionment factor.

D. SITUATION 4: A PRODUCT COVERED BY MULTIPLE PATENTS

In this situation, in which a product is covered by multiple patents, there is no smallest salable unit that practices a single patent. In other words, the entire product is the smallest salable unit, but the allegedly infringing patent does not define the entire product. Here, the value of the patent must be determined relative to the entire product. Although the entire product is used as a base, this does not violate the EMVR because the entire product is the smallest salable unit.¹⁸⁹ Additionally, the apportionment will be carried out during the royalty rate analysis. The analysis in this scenario is similar to Situation 3, except the base is larger. This presents some complications with combinatorial explosion if conjoint analysis is used, but fractional factorial designs provide a potential solution to reduce the number of attributes. Additionally, because these methods isolate the patent’s contributions to the product, there is less of a concern that the larger base will lead to overcompensation than if only the *Georgia-Pacific* factors were used.

188. *Lucent Techs., Inc. v. Gateway, Inc.*, 580 F.3d 1301, 1308–09 (Fed. Cir. 2009).

189. *See Tomita Techs. USA, LLC. v. Nintendo Co., Ltd.*, No. 11 Civ. 4256, 2013 WL 4101251 (S.D.N.Y. Aug. 14, 2013) (finding the EMVR was not implicated even though the Nintendo 3DS gaming system was used as the royalty base because the 3DS itself was the smallest saleable patent-practicing unit in which the patent’s technology was utilized).

E. SITUATION 5: A NON-MARKET DRIVING PATENT DIVORCED FROM CONSUMER DEMAND

Here, the patent is not actually a feature consumers look for when they use the product. In contrast to Situation 3, the patent here covers a technology that is extrinsic to the core functionality of the product. An example of this is *Uniloc*, where the patented software registration system was not part of Microsoft Office or Window's operations.¹⁹⁰ There, the software, which was what consumers were paying for, did not run on or incorporate the *Uniloc* patent; the patented technology was completely divorced from consumer demand. There is no reason why the reasonable royalties should be tied to the product in this case. Because the patented feature is not part of the user experience, there is no way to determine its contribution to the product. Conjoint analysis is unlikely to be useful here as the feature is not tied to consumer use of the product. In *Uniloc*, the royalty figures were suggested independent of their contribution to the product. Following that precedent, the value of the patent can be determined relative to the next-best non-infringing alternative or the cost of a design-around without tying the patent to the product. In this situation, multiplying a dollar amount by the number of units sold avoids the need for determining a royalty base.

V. CONCLUSION

The higher stakes and increasing frequency of patent litigation has brought patent damages into the spotlight. Specifically, concerns regarding massive awards to non-practicing entities spurred the Federal Circuit to revisit the entire market value rule and apportionment in the context of reasonable royalties. With its recent string of decisions in *Lucent*, *Uniloc*, and *LaserDynamics*, the Federal Circuit has clarified and limited the application of the EMVR and reintroduced apportionment as a central theme in addressing damages on infringing multi-component products. Furthermore, the debut of conjoint analysis and the Nash bargaining solution in reasonable royalty calculations has increased the tools available for courts to determine royalty figures. However, the addition of new methodologies also increases the risk of misapplying accepted concepts in inappropriate situations. Courts can guard against this danger by retaining a strong grasp on when certain methodologies may be more appropriate.

190. *Uniloc USA, Inc. v. Microsoft Corp.*, 632 F.3d 1292, 1296 (Fed. Cir. 2011).

APPENDIX: NASH BARGAINING SOLUTION DERIVATION

The NBS divides the surplus from the license according to five conditions:¹⁹¹

- (1) Pareto efficiency, when there is no other solution where one party can be better off without making the other party worse off;
- (2) neither party's share (π_1 and π_2) of the total profits (Π) is less than its disagreement profits (d_1 and d_2);
- (3) the solution is independent of how payoffs are measured;
- (4) eliminating alternatives that were not chosen does not affect the solution;
- (5) if the parties have equal bargaining positions, then the solution treats them equally.

Nash proved that there is only one point or solution that could satisfy the five conditions, which can be found through the following maximization problem:¹⁹²

$$\max(\pi_1 - d_1)(\pi_2 - d_2)$$

Subject to the conditions for equilibrium payoff where π_i^* is the equilibrium payoff for party i

$$\pi_1^* - d_1 = \pi_2^* - d_2 \text{ (equation 1)}$$

$$\pi_1^* + \pi_2^* = \Pi \text{ (equation 2)}$$

Equation 1 can be rearranged to express π_1^* in the following manner:

$$\pi_1^* = \pi_2^* - d_2 + d_1 \text{ (equation 3)}$$

Substituting equation 3 for the value of π_1^* in equation 2 yields:

$$\pi_2^* - d_2 + d_1 + \pi_2^* = \Pi$$

$$2\pi_2^* = \Pi - d_1 + d_2$$

191. See Platt & Chen, *supra* note 128; Choi & Weinstein, *supra* note 40, at, page 53–54.

192. See Platt & Chen, *supra* note 128; Choi & Weinstein, *supra* note 40, at, page 53–54.

The same steps can be applied to isolate the variable π_1^* . Then, solving the equations for π_1^* and π_2^* respectively yields the Nash bargaining solution:

$$\pi_1^* = d_1 + \frac{1}{2}(\Pi - d_1 - d_2)$$

$$\pi_2^* = d_2 + \frac{1}{2}(\Pi - d_1 - d_2)$$

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ON APPROPRIATION: *CARIOU V. PRINCE* AND MEASURING CONTEXTUAL TRANSFORMATION IN FAIR USE

Jonathan Francis[†]

Oliver Wendell Holmes once wrote: “It would be a dangerous undertaking for persons trained only to the law to constitute themselves final judges of the worth of [an artistic work], outside of the narrowest and most obvious limits.”¹ Yet, although courts have freely quoted Justice Holmes when allegedly disavowing their interest in making artistic judgments,² few have followed his advice,³ and fewer, if any, have realized Holmes provided additional guidance only a few sentences further down the page. After warning judges to not judge art lest they miss the new language of genius, Homes wrote of these uncreated works: “if they command the interest of any public, they have a commercial value—it would be bold to say that they have not an aesthetic and educational value—and the taste of any public is not to be treated with contempt.”⁴ The problem that courts face in adhering to

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1. *Bleistein v. Donaldson Lithographing Co.*, 188 U.S. 239, 251–52 (1903).

2. *See, e.g., Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569 (1994); *Cariou v. Prince*, 714 F.3d 694, 711 (2d Cir.), *cert. denied*, 134 S. Ct 618 (2013); *Blanch v. Koons*, 467 F.3d 244 (2d Cir. 2006); *Mattel, Inc. v. Walking Mountain Prods.*, 353 F.3d 792 (9th Cir. 2003); *Suntrust Bank v. Houghton Mifflin Co.*, 268 F.3d 1257 (11th Cir. 2001); *Dr. Seuss Enters., L.P. v. Penguin Book USA, Inc.*, 109 F.3d 1394 (9th Cir. 1996); *Rogers v. Koons*, 960 F.2d 301 (2d Cir. 1992).

3. Although courts generally proclaim that notions of judicial restraint bar their engagement in artistic criticism in the cases, current fair use jurisprudence effectively makes this non-engagement impossible. In determining the transformative quality of the alleged infringing artwork, courts often engage in artistic criticism in making that judgment. This in itself is understandable—the standard for transformation has become one in which the court examines the use as it would appear to the “reasonable observer,” and the court cannot help but engage in artistic criticism to determine whether the use will manifest a distinct aesthetic. *See, e.g., Cariou*, 714 F.3d at 711 (“Lozenges painted over the subject’s eyes and mouth . . . the subject appears anonymous, rather than as the strong individual who appears in the original.”); *Leibovitz v. Paramount Pictures Corp.*, 137 F.3d 109, 114 (2d Cir. 1998) (“Because the smirking face of Nielsen contrasts so strikingly with the serious expression of the face of Moore, the ad may reasonably be perceived as commenting on the seriousness, even the pretentiousness, of the original.”); *Mattel*, 353 F.3d at 802 (“Forsythe conveys a sexualized perspective of Barbie . . .”).

4. *Bleistein*, 188 U.S. at 251–52.

Justice Holmes's wise words is discerning a reliable measure of the public's taste. The current interpretation of the fair use doctrine, a common law creation subsequently codified in the Copyright Act of 1976,⁵ attempts to solve this quandary by asking to what extent the new work is "transformative."⁶ This question is allegedly subsumed within the inquiry into the first factor of the statutory prescription—"the purpose and character of the use."⁷ The problem is that when an artist invokes the fair use defense, there is no singular definition of "transformative."⁸ And the specific interpretation used is often of paramount importance, since many applications of the term appear conclusory for the overall finding—i.e., "label[ing] a use 'not transformative' as a shorthand for 'not fair,' and correlatively 'transformative' for 'fair.'"⁹ This is not pure conjecture, as recent empirical studies have shown that "the transformative use paradigm, as adopted in *Campbell v. Acuff-Rose* overwhelmingly drives fair use analysis in the courts today."¹⁰

The recent Second Circuit decision in *Cariou v. Prince* continues this conclusory use of "transformation" in the fair use inquiry and further enlarges the importance of the concept in the overall fair use inquiry. In doing so, the court seized on *Campbell*'s focus on the audience reception as indicative of the transformativeness of a work and stated the focus of the inquiry was on the work itself and not the author's intent.¹¹ Although at first glance this holding invites praise for recognizing postmodern concepts of authorship, it buries the recognition beneath an insistence on judging the manifestation of new and distinct expression through physical alteration. This reliance on physical alteration leaves a creator unsure of just how much alteration is needed before a court will find her new work has altered the original's expression sufficiently to manifest new and different meaning. In expounding physical change as the genesis for transformation, the court betrays a lack of understanding for the conceptual underpinnings of (post)modern art.

5. 17 U.S.C. § 107 (2012).

6. *Campbell*, 510 U.S. at 579 ("[T]he goal of copyright, to promote the sciences and the arts, is generally furthered by the creation of transformative works.").

7. See 17 U.S.C. § 107(1) (2012).

8. The term "transformative" was first used in the context of fair use by Judge Pierre Laval in *Toward a Fair Use Standard*, 103 Harv. L. Rev. 1105 (1990).

9. 4 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT § 13.05[A][1][b] (2013).

10. Neil Netanel, *Making Sense of Fair Use*, 15 LEWIS & CLARK L. REV. 715 734 (2011); see also Barton Beebe, *An Empirical Study of U.S. Copyright Fair Use Opinions, 1978-2005*, 156 U. PENN. L. REV. 549, 605–06 (2008); *infra* note 32 and accompanying text.

11. *Cariou v. Prince*, 714 F.3d 694, 711 (2d Cir.), *cert. denied*, 134 S. Ct 618 (2013).

Using audience reception as a signifier for transformation invites difficult questions when presented with works generally categorized as appropriation art. At the start of the twentieth century, a number of artists began to explore the possibilities of using ready-made objects as material for “creation and as a method for articulating social criticism.”¹² Within this nascent period, Marcel Duchamp created *Fountain*, an existing urinal he signed “R. Mutt.” Duchamp then submitted the sculpture to galleries as a work of art, begging the fundamental question: what is art?¹³ Modern artists such as Andy Warhol, Robert Rauschenberg, and Sherri Levine are but a few who have continued to challenge society’s understanding of itself, appropriating the materials and objects created by others to comment on the values embodied in those existing works.

Few contemporary appropriation artists are more notorious or celebrated than Richard Prince.¹⁴ Throughout his career, Prince has pushed the boundaries of ownership, using rephotography and appropriation to represent and therefore alter the meaning of the common.¹⁵ His appropriation and representation often function as an exploration of what the original work imagined.¹⁶ Prince’s work has explored modern popular presentations of gender, race, and cultural appropriation.¹⁷ To inquire whether one subscribes

12. E. Kenly Ames, *Beyond Rogers v. Koons: A Fair Use Standard for Appropriation*, 93 COLUM. L. REV. 1473, 1477 (1993).

13. Only a photograph exists of the original object, taken by the modern photographer Alfred Stieglitz. (Stieglitz likely disposed of the original work after he had finished.) Stieglitz’s photograph was later exhibited in the avant-garde magazine, *The Blind Man*, accompanied by an anonymous manifesto reading in part, “Whether Mr. Mutt with his own hands made the fountain or not has no importance. He CHOSE it. He took an ordinary article of life, placed it so that its useful significance disappeared under the new title and point of view—created a new thought for that object.” THE BLIND MAN, no. 2, May 1917, available at http://www.toutfait.com/issues/issue_3/Collections/girst/Blindman2/5.html. Ironically, the versions reproduced decades later for placement in some of the world’s most important public collections (including the San Francisco Museum of Modern Art, the Centre Georges Pompidou, and the Tate Modern) were carefully crafted handmade facsimiles of the original readymade. Martin Gayford, *Duchamp’s Fountain: The practical joke that launched an artistic revolution*, THE TELEGRAPH, Feb. 16, 2009, <http://www.telegraph.co.uk/culture/art/3671180/Duchamps-Fountain-The-practical-joke-that-launched-an-artistic-revolution.html>.

14. Jeff Koons, both celebrated and reviled for his work, might be one of the few artists that are equally notorious and celebrated. Koons is also of legal fame for being sued multiple times for copyright infringement. See, e.g., *Rogers v. Koons*, 960 F.2d 301 (2d Cir. 1992); *Blanch v. Koons*, 467 F.3d 244 (2d Cir. 2006).

15. NANCY SPECTOR, GLENN O’BRIEN, JOHN DOGG & JACK BANKOWSKY, RICHARD PRINCE (2007).

16. *Id.* at 31 (quoting Prince on his rephotography).

17. See generally *id.* (examining multiple instances of Prince exploring gender roles through replacement of advertising copy, as well as appropriation of iconic sex symbols such as the American cowboy).

to a favorable view of Prince's work, or whether one finds it lacking in creativity and substance, misses engaging the critical inquest: Prince's work, and that of many other appropriation artists, has value because a "discursive" community has formed around his work.¹⁸ Whether the critical reception is positive or negative is almost beside the point.

Although not the exclusive method, the existence of discursive communities can demonstrate the societal value, and thus arguably the transformative nature, of a single work of art. The question for a fair use inquiry then becomes how to incorporate this evidence to simplify this inquiry and give greater clarity to authors on both sides of the fair use divide. Presentational context can alter an audience's reception of the work, and if audience reception is to be a determining factor as to whether a secondary work is transformative, a test that can adequately capture this reception is necessary. This test is not the one proposed in *Cariou v. Prince*, where the court held the two works side-by-side to determine the expressive qualities of the physical differences.¹⁹ In certain instances, especially those implicating First Amendment rights and authorial interests of cultural progression, the market can reflect audience reaction and provide a gauge to help a court determine the true transformative nature of a work. If courts look to market indicators to assist them in determining whether a work is transformative, judges will no longer need to assess the artistic value of a work. And instead of allowing a subjective view of a work's "transformation" to drive an ex ante analysis of the potential market harm, courts can limit their inquiry to an ex post determination of any realized market harm using principles from other, more appropriate legal principles.

Part I of this Note examines the common-law basis for the Copyright Act and the fair use doctrine, and then discusses the rising influence and judicial interpretation of the idea of transformation in fair use analysis. Part II then discusses the recent Second Circuit decision in *Cariou v. Prince*,²⁰ examining the holding with a view towards the court's analysis in determining transformation and the resulting effect on the market. Part III introduces the economic theory of fair use, and then examines how this theory can be colored by social science theory to produce a more appropriate test of transformation. Part IV concludes.

18. See Laura Heymann, *Everything is Transformative: Fair Use and Reader Response*, 31 COLUM. J.L. & ARTS. 445, 449 (2008).

19. See *Cariou v. Prince*, 714 F.3d 694, 707 (2d Cir.), cert. denied, 134 S. Ct 618 (2013).

20. *Id.* at 711.

I. RISE OF THE TRANSFORMERS

The fair use defense codified at § 107 exists as a “First Amendment accommodation” to moderate the tension between property theories underpinning copyright law and free speech interests.²¹ The Copyright Act distinguishes between copyrightable expression and uncopyrightable facts and ideas.²² But whereas the copyrighted expression is otherwise inviolate, fair use permits its use in service of the public’s interest in the progress of science.²³ It “permits courts to avoid rigid application of the copyright statute when, on occasion, it would stifle the very creativity which that law is designed to foster.”²⁴

Section 107 provides four factors for a court to consider when a defendant claims fair use.²⁵ The first of these statutory factors is the “purpose and character of the use.”²⁶ In *Campbell v. Acuff-Rose Music, Inc.*,²⁷ the Court characterized the “central purpose” of the inquiry into this factor as determining to what extent the secondary use is “transformative.”²⁸ In adopting the term that Judge Pierre Leval had proposed in his 1990 article, *Toward a Fair Use Standard*,²⁹ the Court made a slight but significant alteration to the meaning of the word, and shifted the focus from the author’s purpose in creating the work to the audience’s reception of the work.³⁰ In focusing the inquiry in this manner, the Court instituted a framework that placed judicial consideration of the expressive differences at the forefront of any fair use claim.

The Court’s adoption of “transformation” instituted a sea change, moving fair use jurisprudence into a regime where the consideration of “transformation” was paramount in the overall determination of fair use. After *Campbell*, circuit court opinions started to address whether an alleged

21. *Golan v. Holder*, 132 S. Ct. 873, 890 (2012); see NIMMER & NIMMER, *supra* note 9, § 13.05 (suggesting that the Court has recognized the principles of fair use as a constitutional necessity); see generally U.S. CONST. art. I, § 8, cl. 8 (securing exclusive property rights to exploit the fruits of one’s intellectual labors).

22. See 17 U.S.C. § 102(b) (2012). The Supreme Court has noted this idea/expression dichotomy also moderates the tension between copyright protection and the First Amendment. *Golan*, 132 S. Ct. at 890.

23. As noted above in note 6, *supra*, “science” refers to the creative arts.

24. *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 577 (1994) (quoting *Stewart v. Abend*, 495 U.S. 207, 236 (1990)).

25. 17 U.S.C. § 107 (2012).

26. *Id.*

27. 510 U.S. 569 (1994).

28. *Id.* at 579.

29. Pierre Leval, *Toward a Fair Use Standard*, 103 HARV. L. REV. 1105 (1990).

30. Heymann, *supra* note 18, at 452.

infringing work was transformative approximately five hundred percent more often than pre-*Campbell*.³¹ The effect was profound in the overall outcomes in fair use litigation. A recent empirical study has concluded that although a favorable finding of transformation under the first factor is not necessary for a finding of fair use,³² it is generally sufficient to do so.³³

The question of transformation driving the overall fair use inquiry has continued to the current day. However, with the Supreme Court having declined to grant certiorari to another fair use case addressing transformative uses,³⁴ the evolution of the legal application of the concept is seen in the United States Court of Appeals. Post-*Campbell* (and pre-*Carion*), *Blanch v. Koons*³⁵ illuminated the change *Campbell* wrought in fair use jurisprudence involving appropriation art. The Second Circuit examined the physical

31. Prior to the Supreme Court's decision in *Campbell*, Circuit Courts of Appeals referenced "transformative use" (or the doctrine under the guise of "productive use") in seven of forty-five cases, or 15.6 percent. Post-*Campbell* circuit courts referenced the doctrine in thirty-five of forty-three cases, or 81.4 percent. The ratio was similar when examining district court decisions temporally divided by *Campbell*—nine of ninety-two cases (9.8 percent) prior and seventy of 119 (58.9 percent) after *Campbell*. Beebe, *supra* note 10, at 604–05.

32. *Campbell*, 510 U.S. at 579 (citing *Sony Corp. of America v. Universal City Studios, Inc.*, 464 U.S. 417, 455 n.40 (1984)). Barton Beebe's conclusion in his study of fair use opinions was similar. He found that because "25 (or 36.8%) of the 68 post-*Campbell* opinions that found fair use made no reference to transformativeness and 4 explicitly found that the defendant's use was not transformative." Beebe, *supra* note 10, at 605. However it is important to note that Beebe's data included a number of fair use cases that were outside the scope of uses where transformation is important. Limiting Beebe's data to cases in which he determined the court had characterized the Defendant's use as either parodic/satirical or for criticism/comment alters the results. Out of thirty total cases, only six (twenty percent) made no reference to transformation. (All six were district court opinions, and three of the six came down within the first eighteen months of *Campbell*.) Of the twenty-four opinions to discuss transformation, one case was unclear as to whether the use was transformative. The remaining twenty-three broke down as follows: fifteen of the seventeen that found the defendant's use was transformative found in favor of fair use, and six of the six that found the defendant's use was not transformative did not find fair use. (Beebe's data-driven approach can also be criticized in certain manners for how he categorized the cases. For example, he declined to categorize *Blanch v. Koons* as involving either comment or criticism. *See id.* at 623–24 (explaining Beebe's collection and coding process of the opinions). Data set and coding form are available at www.bartonbeebe.com.)

33. Beebe, *supra* note 10, at 605. For modified data for cases involving criticism or comment, see *supra* note 32.

34. In the context of fair use, transformative uses can be roughly divided into three main groups: parodies (*see, e.g., Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569 (1994)); other transformative critiques (*see, e.g., Suntrust v. Houghton Mifflin Co.*, 252 F.3d 1165 (11th Cir. 2001)); and transformative adaptations (*see, e.g., Blanch v. Koons*, 467 F.3d 244 (2d Cir. 2006)). Pamela Samuelson, *Unbundling Fair Uses*, 77 *FORDHAM L. REV.* 2537, 2548–55 (2009).

35. 467 F.3d 244 (2006).

manifestation of the changes Koons made to the original copyrighted work and determined the outcome of the first factor—“the purpose and character of the use”—and resultantly, the overall fair use test, based on whether these physical differences embodied a sufficient transformation.³⁶ Although this current construction of the test may appear to sanction widespread appropriation of copyrighted material, the focus on the physical ignores the fundamental reality that, although physical alteration may be sufficient for transformation, it is not necessary.

A. SECTION 107: STATUTORY FAIR USE

Fair use “permits and requires courts to avoid rigid application of the copyright statute, when on occasions, it would stifle the very creativity which that law is designed to foster.”³⁷ Under the Copyright Act of 1976, the owner of a copyright possesses the exclusive right to reproduce the copyrighted work in copies and to prepare derivative works.³⁸ Section 107 of the Copyright Act of 1976 provides a fair use exemption³⁹ for works that infringe on those exclusive rights specified in § 106.⁴⁰

In determining whether the use made of a work in any particular case is a fair use the factors to be considered shall include—

(1) the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes;

36. *Blanch v. Koons*, 467 F.3d 244, 253 (2d Cir. 2006) (noting that Koons’s adaptation differed from the original in “its colors, the background against which it is portrayed, the medium, the size of the objects pictured, the objects’ details”); *Cariou v. Prince*, 714 F.3d 694, 706 (2d Cir.), *cert. denied*, 134 S. Ct. 618 (2013) (“Prince’s composition, presentation, scale, color palette, and media are fundamentally different and new compared to the photographs.”).

37. *Campbell*, 510 U.S. at 577 (quoting *Stewart v. Abend*, 495 U.S. 207, 236 (1990)).

38. *See* 17 U.S.C. § 106(2) (2012). In the context of determining the “transformativeness” of a work in furtherance of the fair use inquiry, the statutory definition of what constitutes a “derivative work” can cause confusion. Section 101 defines a derivative work as one “based upon one or more preexisting works . . . in which [the original] work may be recast, transformed, or adapted.” 17 U.S.C. § 101. Roughly differentiating between the two, “transformation” in the context of a derivative work encompasses works that are a shift in kind and not necessarily meaning, while “transformation” in the context of fair use indicates an alteration of something more fundamental in the essence of the original work. For more detailed exploration of the term as applied in the two inquiries, see generally R. Anthony Reese, *Transformativeness and the Derivative Work Right*, 31 COLUM. J.L. & ARTS 467 (2008); Mary Wong, “Transformative” User-Generated Content in Copyright Law: *Infringing Derivative Works or Fair Use*, 11 VAND. J. ENT. & TECH. L. 1075 (2009).

39. *See* 17 U.S.C. § 107.

40. *See* 17 U.S.C. § 106.

- (2) the nature of the copyrighted work;
- (3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole;
- (4) the effect of the use upon the potential market for or value of the copyrighted work.⁴¹

At its most basic, fair use allows for the copying of part or the whole of a copyrighted work without the permission of the copyright owner.⁴² In conjunction with the idea/expression dichotomy, fair use is crucial to protect First Amendment interests by “allow[ing] the public to use not only facts and ideas⁴³ contained in a copyrighted work, but also expression itself in certain circumstances.”⁴⁴

In recognizing the fair use defense in § 107 of the 1976 Copyright Act, Congress noted that the four enumerated factors were simply a codification of the common law.⁴⁵ It was Justice Story’s 1837 *Folsom v. Marsh*⁴⁶ opinion that provides much of the original principles that Congress codified into statute.⁴⁷ Arguably the most important contribution of Justice Story’s opinion was the maxim that each case presents unique factors and must be addressed on balance of the purpose of the doctrine.⁴⁸ But although the specific language in the statute allows for a non-exclusive inquiry of the four factors⁴⁹ and suggests that courts retain the ability to adjust the inquiry as they see fit,

41. 17 U.S.C. § 107.

42. *Id.*

43. Facts and ideas are protected under §102(b). 17 U.S.C. § 102(b) (“In no case does copyright protection for an original work of authorship extend to any idea . . . principle, or discovery . . .”).

44. *Elder v. Ashcroft*, 537 U.S. 186, 219 (2003).

45. *NIMMER & NIMMER*, *supra* note 9, at 1; *see also* *Harper & Row, Publishers, Inc. v. Nation Enters.*, 471 U.S. 539, 549 (1985).

46. *Folsom v. Marsh*, 9 F. Cas. 342 (1841).

47. WILLIAM F. PATRY, *THE FAIR USE PRIVILEGE IN COPYRIGHT LAW* 3 (2d ed. 1995).

48. *Folsom*, 9 F. Cas. at 344 (“In many cases, indeed, what constitutes an infringement of a patented invention, is sufficiently clear and obvious, and stands upon broad and general agreements and differences; but, in other cases, the lines approach very near to each other, and, sometimes, become almost evanescent, or melt into each other.”).

49. The text of the statute informs that a determination of fair use “shall include” indication that the four statutory factors are non-exhaustive, and courts may adopt other forms of analysis so long as the inquest is taken in light of the overall goal of copyright. *See* 17 U.S.C. § 107 (2012); *see also* *NIMMER & NIMMER*, *supra* note 9, § 13.05[A][5][b][(noting that the factors are “illustrative and not limitative,” and that a number of “fifth factors” have popped up at times); *Leval*, *supra* note 29, at 1105 (“[A]lthough leaving open the possibilities that other factors may bear on the [fair] use] question, the statute identifies none.”).

modern courts have generally engaged in formalistic examinations of the fair use defense.⁵⁰

The preamble to the statute lists six favored uses: criticism, comment, news reporting, teaching, scholarship, and research.⁵¹ Of these, interests in criticism and commentary both implicate First Amendment principles of free speech and expression, as well as authorial interests in promoting the ongoing creation of new works and ideas.⁵² Fair use protects these interests in two ways: first, by providing an essential safeguard for resolving conflict between copyright owners' exploitative rights and the free speech and expression interests of the public,⁵³ and second, by providing authors with the freedom to make productive use of another's work.⁵⁴

B. JUDGE LEVAL AND "TRANSFORMATION"

In his seminal article, *Towards a Fair Use Standard*, Judge Leval argued that the primary inquiry into whether the challenged use should qualify for the fair use exemption should be to what extent the use is transformative.⁵⁵ This inquiry, Judge Leval believed, should drive the analysis of the first statutory factor. He further argued that, in contrast to courts' previous consideration of the fourth factor (the market harm) as paramount in a fair use case, the first factor was the "soul of fair use."⁵⁶ Judge Leval recognized two crucial facts with regard to creativity: first, no creative activity is wholly original, and second, much of the creative product is explicitly referential.⁵⁷ Fair use protects this "secondary creativity" by protecting the creation of transformative works that draw upon existing works for inspiration or raw

50. Beebe, *supra* note 10, at 561–64 (concluding from statistical analysis of fair use opinions from 1978 through 2005 that courts shifted from a more flexible inquiry towards a rhetorically formal treatment that roughly coincided with the Supreme Court's 1985 opinion in *Harper & Row*, 471 U.S. 539).

51. *Id.*

52. Samuelson, *supra* note 29, at 2544 (noting that criticism, commentary, and news reporting are often evident in fair-use cases that implicate First Amendment principles).

53. *Id.* at 2546–47. Pamela Samuelson also identifies three main policies—(1) promoting free speech and expression interests of subsequent authors and the public, (2) the ongoing progress of authorship, and (3) learning—that underpin the six purposeful uses set forth in the preamble to 17 U.S.C. § 107. *Id.* at 2546–47.

54. *Id.* at 2540.

55. *See generally* Leval, *supra* note 29.

56. *Compare* Leval, *supra* note 29, at 1116 ("Factor One is the soul of fair use. A finding of justification under this factor seems indispensable to a fair use defense. The strength of the justification under this factor must be weighed against the remaining factors . . ."), *with* *Harper & Row, Publishers, Inc. v. Nation Enters.*, 471 U.S. 539, 567 (1985) ("[The fourth] factor is undoubtedly the single most important element of fair use.").

57. Leval, *supra* note 29, at 1109.

materials.⁵⁸ In articulating his construction, Judge Leval remained true to the statutory formulation of “the purpose of the use” and whether the use “fulfill[s] the objective of copyright law to stimulate creativity for public illumination.”⁵⁹ In doing so, Judge Leval drew upon property theories of creation and found authorial intent to be important.⁶⁰

In appropriating Justice Story’s words asking whether the second work “supersedes” the original work, Judge Leval removed this question from the inquiry of the monetary harm to the original artist or author and altered it into supporting an inquest into the “purpose” of the use.⁶¹ Judge Leval went further in rendering the question of market harm subservient to the requirement of transformation:

The fact that the secondary use does not harm the market for the original gives *no assurance* that the secondary use is justified. Thus, notwithstanding the importance of the market factor . . . it should not overshadow the requirement of justification under the first factor, without which there can be no fair use.⁶²

This formulation contradicts the common law precedent that formed the basis for the 1976 statutory language. The focus on sufficient transformation of the derivative work has led to a regime in which judges are left to their own devices in assessing whether the challenged use is productive and “employ[s] the quoted matter in a different manner or for a different purpose from the original.”⁶³ But what is manner and what is purpose? Judge Leval illuminated little beyond that which is derivative from the facts of the two cases⁶⁴ that prompted his commentary on the doctrine.⁶⁵

58. *Id.* at 1109–1110.

59. *See id.* at 1111.

60. Arguably the formulation of the first factor is contradictory, as “purpose” implies authorial intent and “character” implies audience understanding. It is not clear why Congress chose to word the statute this way; needless to say, the Supreme Court and current case law have effectively dispensed with looking to the purpose of the use and instead focus the fair use analysis exclusively on the character, with the attendant problems noted in Section I.C.1.

61. Compare Leval, *supra* note 29, at 1111 (using the quotation as asking whether the use of the copyrighted material employs it in a different manner or for a different purpose than the original) with *Folsom v. Marsh*, 9 F. Cas. 342, 348 (1841) (writing that the court must look to “the degree in which the use may prejudice the sale, or diminish the profits, or supersede the objects, of the original work”).

62. Leval, *supra* note 29, at 1124.

63. *Id.* at 1111.

64. *Salinger v. Random House, Inc.*, 650 F. Supp. 413 (S.D.N.Y. 1986), *rev’d*, 811 F.2d 90 (2d Cir.); *New Era Publ’ns Int’l v. Henry Holt & Co.*, 695 F. Supp. 1493 (S.D.N.Y. 1998), *aff’d on other grounds*, 873 F.2d 576 (2d Cir. 1989).

65. It is also unclear whether Leval viewed these two inquires as conjunctive or disjunctive. In attempting to encompass both formulations, Leval appears to be uncertain

C. BEFORE *CAMPBELL*: *ROGERS V. KOONS*

The first major case to grapple with statutory fair use in the context of appropriation art was *Rogers v. Koons*.⁶⁶ Jeff Koons, a notable contemporary artist, used a postcard image of a smiling couple holding a litter of puppies as source material for a sculptural representation of the photograph.⁶⁷ Koons's artwork made a few minor alterations to the colors in Rogers's original photograph, but otherwise requested his artisans to reproduce the reality of Rogers's photograph.⁶⁸ The court's opinion was influenced by its inability to discern any successfully parodic element in Koons's *String of Puppies*,⁶⁹ an element the court required for a favorable finding under the first factor of the fair use inquiry.⁷⁰ Describing the photograph Koons used as the basis for his sculpture as the "expression of a typical American scene—a smiling husband and wife holding a litter of charming puppies," the court found it "difficult to discern any parody of the photograph 'Puppy' itself."⁷¹ From an alternative perspective though, where the court saw charm in Rogers' idyllic photograph, Koons saw the embodiment of a society in thrall to the "mass production of commodities and media images."⁷² Thus, in selecting that specific photograph as his subject, Koons was arguably commenting not only on society at large, but also critiquing and parodying Rogers's unknowing photographic expression of that idea.

The market possibly recognized the distinct purposes behind the two pieces, valuing *String of Puppies* in excess of \$100,000,⁷³ while Rogers sold the

exactly how to characterize the genesis of the creativity—whether the protection is to protect creativity already expressed or to protect creativity still to come. If the former, then the focus should be on the purpose of the use since that is the clearest expression of intended creativity; if the latter, then the focus should be on the character of the use, since that protects the ability of the audience to experience creativity and "stand on the shoulders of giants." Arguably, this is a bit of a circular progression. He does seem to hint at the latter being dominant: "the use must be of a character that serves the copyright objective of stimulating productive thought and public instruction without excessively diminishing the incentives for creativity." Leval, *supra* note 29, at 1110.

66. *Rogers v. Koons*, 960 F.2d 301 (2d Cir. 1992).

67. *Id.* at 305.

68. *Id.*

69. *Id.* at 310.

70. *Id.* ("It is the rule in this Circuit that . . . the copied work must be, at least in part, an object of the parody, otherwise there would be no need to conjure up the original work.")

71. *Id.* at 303, 310.

72. *Id.* at 309.

73. *Id.* at 305 ("Three of the four copies made were sold to collectors for a total of \$367,000; the fourth or artist's copy was kept by Koons.")

original photograph to the commissioning couple for \$200.⁷⁴ Although, admittedly, it is unknowable to what extent the physical alteration from photograph to sculpture contributed to the price discrepancy, the contribution of certain other factors to the differing valuation of the two works can be explored. Although, as with the changing medium, the contextual factors cannot be priced with specificity, as forces driving the valuation of Koons's sculpture they are incontrovertible. First, the market would have viewed Koons's sculpture through the lens of his previous work. In other words, Koons's history of biting commentary on popular culture was integrated into *String of Puppies*. Second, the presentation of the sculpture in a show entitled *Banalities Show* at Sonnabend Gallery, a high-end New York art gallery, added a contextual imprimatur of validity and importance to the artwork. Regardless of a person's individual affection for *String of Puppies*, the audience as a whole inarguably distinguished between Koons's sculpture and Rogers's photograph. Although the court found that Koons copied Rogers's expression and not simply the idea,⁷⁵ it misunderstood a crucial point: Koons was not copying Rogers's expression or his idea, he was directly commenting on Rogers's expression of Americana. Although the court missed this distinction, the audience did not, as partly evidenced by the price discrepancy between the two works.

D. *CAMPBELL*

Although the Supreme Court's decision in *Campbell* clarified certain aspects of the § 107 inquiry, most notably explaining that a commercial use does not make a use dispositively unfair,⁷⁶ in other aspects it simply created more confusion, such as distinguishing parody from satire and crucially requiring a secondary use to comment successfully on the physical formulation of the original work.⁷⁷ In holding that parody was entitled to a

74. *Id.* at 304. Rogers also licensed the photograph for reproduction on note cards and postcards—it was through this licensed printing that Koons encountered the work he subsequently used as material for his sculpture. *Id.*

75. *Id.* at 308 (“[H]ere, Koons used the identical expression of the idea that Rogers created.”).

76. *See* *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 584 (1994) (internal citation omitted) (“If, indeed, commerciality carried presumptive force against a finding of fairness, the presumption would swallow nearly all of the illustrative uses listed in the preamble paragraph of § 107, including news reporting, comment, criticism, teaching, scholarship, and research, since these activities are generally conducted for profit in this country.”).

77. *See id.* at 580. Additionally, the focus in the opinion on issues specific to parody limited the reach of the opinion to other areas. Inherent in parody and satire is commentary, but moving beyond those specific categories, the Court touched little on what constitutes a productive use and did not address some of the other factors Leval relies upon in his

fair use exemption, the Court shined little additional light on the specific requirements for a work to qualify as commentary. The Court held that 2 Live Crew's parody of Roy Orbison's "Pretty Women" was entitled to fair use protection, and the song's commercial nature did not preclude it from protection as a parody.⁷⁸ In approving parody as a legitimate form of criticism protected under § 106, the Court conferred institutional legitimacy upon Judge Leval's term of art, "transformative." However, in doing so, the court subtly recast the question from an intent-based inquiry into an audience-based one.⁷⁹ Although the Court retained the focus on the purpose of the use, it found the answer to be discernible through the audience's reaction.⁸⁰ This was a logical shift, for if the constitutional purpose of copyright is furthered by the public's greater access to and interaction with transformative works,⁸¹ and the existence of separate discursive communities can indicate the presence of transformation, then the answer to the question underpinning fair use, whether a work is "transformative," is inseparable from the public audience's reception of the new work.

Addressing potential market harm, the Court allowed the commerciality of the derivative work to inform a presumption of substantial market harm only in cases involving mere duplication of the original in its entirety.⁸² Conversely, to the extent the secondary use is transformative, "market substitution is less certain."⁸³ However, the Court demurred from clarifying a general conception of market harm in a matter other than critical works, simply choosing to restate much of the accepted doctrine.⁸⁴ The market for derivative works consists only of those markets that the original creator would likely develop, including licensing markets. As an artist is unlikely either to lampoon her own work or license another to do so, the Court was able to short-circuit this inquiry into a theoretical analysis of the derivative

formulation of transformation. See H. Brian Holland, *Social Semiotics in the Fair Use Analysis*, 24 HARV. J.L. & TECH. 335, 350 (2011).

78. *Campbell*, 510 U.S. at 593.

79. Heymann, *supra* note 19, at 449.

80. *Campbell*, 510 U.S. at 583 (noting that 2 Live Crew's song "reasonably could be perceived" as commenting on the naïveté and white-bread sentimentality of Orbison's original).

81. *Id.* at 579.

82. *Id.* at 591.

83. *Id.*

84. See *id.* at 590–94.

market for rap music.⁸⁵ This then allowed the Court to sidestep the issue of conceptualizing the parameters of derivative frameworks.⁸⁶

E. TRANSFORMATION AND APPROPRIATION ART AFTER *CAMPBELL*:
BLANCH V. KOONS

Post-*Campbell*, the Second Circuit revisited the fair use doctrine in another case involving Jeff Koons, this time finding in favor of the defendant.⁸⁷ In 2000, Koons created seven works for a commissioned show at the Deutsche Guggenheim Berlin. To produce these works, Koons scanned appropriated advertisements and other images into a computer, superimposed them over pastoral landscape backgrounds, and printed them to be used as templates for his assistants to paint onto large canvases. One of these resulting works, *Niagara*, contained images from a photograph the plaintiff had taken for a fashion magazine advertisement. In presenting his defense, Koons told the court that he used the image as “fodder for his commentary on the social and aesthetic consequences of mass media.”⁸⁸

In finding that Koons’s work qualified for the fair use exemption, the court appeared to have hedged on whether the author’s intent was relevant to the question of transformation: “Koons’s appropriation of Blanch’s photograph in ‘Niagara’ was intended to be—and appears to be—‘transformative’”⁸⁹ However, a close parsing of the opinion indicates that the court might have found Koons’s work transformative notwithstanding his statements of purpose. In proposing that “[t]he sharply different objectives that Koons had in using, and Blanch had in creating, ‘Silk Sandals’ confirm[ed] the transformative nature of the use,” the court exposes that its inclusion of Koons’s purpose in creating his work is merely an ex post justification for an already transformative use.⁹⁰ And although the court deferred to Koons’s explanation of his purpose, it appeared prepared to rely on its own conclusion if Koons had neglected to supply a justification, stating that “[a]lthough it seems clear enough to us that Koons’s use of a slick fashion photograph enables him to satirize life as it appears when seen through the prism of slick fashion photography, we need not depend on our

85. *See id.* at 592–93.

86. As neither party submitted evidence addressing the effect on the potential market for a non-parodic rap version of Orbison’s tune, the Court indicated this question would be filled on remand. However, before the lower court re-examined the case, the two parties settled. *Id.* at 594.

87. *Blanch v. Koons*, 467 F.3d 244 (2d Cir. 2006).

88. *Id.* at 253.

89. *See id.* at 256.

90. *Id.* at 252.

own poorly honed artistic sensibilities.”⁹¹ At the same time it was disavowing its own artistic sensibilities, however, the court was clearly employing a notion of transformation that involved consideration of the physical manifestations of Koons’s claimed intent.⁹²

II. *CARIOU V. PRINCE* AND THE SUPREMACY OF THE PHYSICAL

In 2013, the Court of Appeals for the Second Circuit found that the artist Richard Prince was not liable for copyright infringement on twenty-five pieces of his *Canal Zone* series of works.⁹³ In finding that Prince’s work was permitted under fair use, the court identified the relevant inquiry under § 107 as neither the author’s intent to comment on the original nor the author’s intent to transform the work with new expression. Rather, the court held that the question is whether the new work has been sufficiently physically transformed so as to impart new meaning or expression to the viewer.

A. THE FACTS OF THE MATTER

In 2000, Patrick Cariou published *Yes Rasta*, a book containing a series of photographs Cariou had taken during a six-year stint living among Rastafarians in Jamaica.⁹⁴ The series was comprised of a number of classical landscapes and portraits attempting to portray the dignity of Rastafarians and their natural environment. Cariou’s publisher printed seven thousand copies of *Yes Rasta*.⁹⁵ Sales figures of the book were minimal.⁹⁶ As for the photographs themselves, excepting a handful of private sales to personal acquaintances, Cariou did not exhibit or sell them.⁹⁷

91. *See id.* at 255.

92. *Id.* at 235 (describing the use of Blanch’s *Silk Sandals* image by noting the “changes in its colors, the background against which it is portrayed, the medium, the size of the objects pictured, the object’s details”).

93. The Appendix to this Note contains two pairs of images. One pair is comprised of a Cariou photograph and the subsequent Prince work, *Graduation*, that the Second Circuit Court of Appeals was unable to determine made fair use of Cariou’s photograph and therefore remanded to the district court. The second pair is again a Cariou photograph and the subsequent Prince work, here Prince’s *Back to the Garden*. The reader is invited to make up her own mind on the extent to which each of Prince’s works alters Cariou’s classical portraiture photographs with “new expression, meaning, or message,” as required by the transformative test put forth in *Campbell*. *See Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 579 (1994).

94. *Cariou v. Prince*, 714 F.3d 694, 699 (2d Cir.), *cert. denied*, 134 S. Ct. 618 (2013).

95. *Id.*

96. *Id.* at 698–99.

97. *Id.* at 699.

Seven years later, Richard Prince exhibited works at a hotel in St. Barth's, including *Canal Zone* (2007), a collage work comprised of thirty-five images torn out of *Yes Rasta*. Prince arranged the altered images of landscapes and Rastafarians in a large grid and tacked them to a single piece of plywood.⁹⁸ Prince subsequently created thirty additional pieces in the *Canal Zone* series, with all but one incorporating images Prince appropriated from *Yes Rasta*.⁹⁹ In late 2008, Prince showed twenty-two works from *Canal Zone* at Gagosian Gallery in New York.¹⁰⁰

Cariou allegedly first learned about Prince's show from Cristiane Celle, a New York gallery owner.¹⁰¹ On December 30, 2008, Cariou filed suit against Prince, Gagosian Gallery, and Lawrence Gagosian, claiming copyright infringement.¹⁰² Prince and his co-defendants asserted a fair use defense, arguing that Prince's use of the photographs was transformative.¹⁰³ Each party subsequently filed a motion for summary judgment.¹⁰⁴

B. THE DISTRICT COURT FINDS NO FAIR USE

In its ruling, the Southern District of New York found Prince's use of the photographs was "not fair use under the Copyright Act."¹⁰⁵ After finding that Cariou's photographs were sufficiently creative to be worthy of copyright protection, the court conducted a standard four-factor fair use inquiry.¹⁰⁶ The court started its analysis of the first factor—the purpose and

98. *Id.* Prince altered some of the images by drawing lozenge and primitive facemasks on some of the Rastafarians' faces, and drawing over other features with magic marker, crayons, pencil, and white acrylic paint. He obscured the faces of others with various other techniques. Affidavit of Richard Prince, Defendant, in Support of Motion for Summary Judgment ¶ 48, *Cariou v. Prince*, 714 F.3d 694 (May 14, 2010) (No. 11-1197-cv) [hereinafter *Prince Aff.*].

99. *Cariou*, 714 F.3d at 699. In sum, to create the *Canal Zone* series, Prince appropriated forty-one images from Cariou's *Yes Rasta*, images from two adult books published by Taschen, images from contemporary music magazines, images from anatomy books Prince had purchased, and a single image from a publication on Bob Marley. *Prince Aff.*, *supra* note 98, ¶ 24. For a detailed description of Prince's process in creating each individual work, see *id.* ¶¶ 32–61.

100. *Cariou*, 714 F.3d at 703.

101. *Id.* at 704.

102. *Id.*

103. *Id.*

104. *Id.*

105. *Cariou v. Prince*, 784 F. Supp. 2d 337, 342 (S.D.N.Y. 2011), *rev'd*, 714 F.3d 694 (2d Cir.), *cert denied*, 134 S. Ct. 618 (2013).

106. The district court went beyond the standard breakdown of the four factors in considering the propriety of Prince's conduct as a relevant sub-factor in determining the "purpose of the use" under the first factor. The court found Prince's bad faith evident under the factual circumstances that were presented and considered this to further weigh against

character of the use—by explaining that the central question was to what extent Prince had infused Cariou’s original photographs with new expression, meaning, or message.¹⁰⁷ In other words, the court asked to what extent Prince’s works were transformative.¹⁰⁸

First, the court rejected Prince’s argument that using copyrighted materials as “raw ingredients” should be considered per se fair use, declaring the lack of any precedent allowing for fair use absent “the new work in some way, comment[ing] on, relat[ing] to the historical context of, or critically refer[ing] back to the original work[.]”¹⁰⁹ Instead, Prince’s works would only be transformative to the extent that they commented on Cariou’s photographs.¹¹⁰ Without commentary, Prince’s works would be infringing derivative works.¹¹¹

In determining whether Prince’s works met this standard, the court focused much of its inquiry on his intent in creating *Canal Zone*, believing Prince’s statement that he did not “really have a message” inherent in his art to indicate that “his purpose in using Cariou’s Rastafarian portraits was the same as Cariou’s original purpose in taking them: a desire to communicate to the viewer core truths about Rastafarians and their culture.”¹¹² In viewing the twenty-eight photographs as a unified whole, the court found the transformative content of Prince’s works to be “minimal at best” and weighed heavily against a finding of fair use.¹¹³

The court then examined the commerciality prong of the first factor of § 107, which asks whether the use of the copyrighted material is “of a commercial nature or for nonprofit educational uses.”¹¹⁴ The court noted that the importance of the commerciality of the alleged infringing use is inversely proportional to the extent of the use’s transformativeness.¹¹⁵ And given its perception of Prince’s works as of low transformative value, the court found this prong of the first statutory factor to weigh against a finding of fair use.¹¹⁶ In sum, although the court wrote that it “recognize[d] the

Prince under the first factor. *Id.* at 351. On appeal, this conduct was not considered relevant under the proper legal standard. *Cariou*, 714 F.3d at 694.

107. *Cariou*, 784 F. Supp. 2d at 347.

108. *Id.*

109. *Id.* at 348.

110. *Id.* at 349.

111. *Id.*

112. *Id.*

113. *Id.* at 350.

114. 17 U.S.C. § 107 (2012).

115. *Cariou*, 784 F. Supp. 2d at 350.

116. *Id.*

inherent public interest and cultural value of public exhibition of art,” it found this interest paled in comparison to the substantial commerciality of Prince’s “use and exploitation” of Cariou’s photographs.¹¹⁷

The court then worked through an analysis of the second and third factors—the nature of the copyrighted work and the portion of the first work used in the second work¹¹⁸—finding both to weigh against Prince’s asserted defense of fair use.¹¹⁹ Under the second factor, Cariou’s photographs were “highly original and creative artistic works” and considered to be at the heart of that which copyright was intended to protect.¹²⁰ The analysis of the third factor was, similar to the commerciality prong of the first factor, considered in relation to the transformative value of Prince’s works.¹²¹ And given its determination that the works were of low transformative value, the court concluded there was little justification for Prince to have appropriated the “central figures” of Cariou’s photographs.¹²²

Then, turning to the fourth factor—“the effect of the use on the potential market for or value of the copyrighted work”¹²³—the court again found the facts weighed against a finding of fair use.¹²⁴ First, the court dismissed as irrelevant Prince’s argument that Cariou had not marketed his works more aggressively, reasoning that Cariou was entitled to have the potential market available should he later decide to exploit the commercial monopoly granted by his copyright.¹²⁵ The court then focused on two specific points in its analysis of the market harm caused by Prince’s works. First, relying on testimony of New York gallerist Celeste Celle that she had planned on showing Cariou’s Rastafarian photographs until she learned Prince had shown *Canal Zone* at Gagosian Gallery, the court found it “clear that the market for Cariou’s [p]hotos were usurped by Defendant[.]”¹²⁶ This constituted harm to the actual market for Cariou’s original works. Second,

117. *Id.* at 351. The court discussed in some detail the specific commercial environment of Prince’s *Canal Zone* show at Gagosian Gallery, including the monetary valuation of the included works, and noted that there was no evidence establishing that Prince’s works were available for public view in advance of them being offered for sale. *Id.* at 350–51.

118. *See* 17 U.S.C. § 107(2)–(3).

119. *Cariou*, 784 F. Supp. 2d at 351–52.

120. *Id.* at 352. For an interesting discussion of the accuracy of this contention, *see generally* Justin Hughes, *The Photographer’s Copyright—Photograph as Art, Photograph as Database*, 25 HARV. J. LAW AND TECH. 339 (2012).

121. *See Cariou*, 784 F. Supp. 2d at 352.

122. *Id.* at 352.

123. 17 U.S.C. § 107(4).

124. *Cariou*, 784 F. Supp. 2d at 353.

125. *Id.* at 353.

126. *Id.* at 353.

the court considered the harm to Cariou's potential licensing market for derivative works. The court believed that allowing Prince to use Cariou's photographs without procuring a license demonstrated that widespread similar practice would destroy the general ability of artists to license their works for others to use.¹²⁷ Therefore, in addition to suffering damage to the actual market for his works, Cariou had suffered the loss of potential licensing fees from Prince's unauthorized use of his photographs.¹²⁸

After examining each of the four statutory factors, the court concluded that none favored a finding of fair use. Thus, the court felt "the purposes of copyright are best served by extending protection to Cariou's [p]hotos," and held that the defendants were not entitled to a fair use defense.¹²⁹ The court then ordered Prince to "deliver up for impounding, destruction, or other disposition, as [Cariou] determines, all infringing copies of the Photographs, including the Paintings, and unsold copies of the Canal Zone exhibition book."¹³⁰

C. THE COURT OF APPEALS FOR THE SECOND CIRCUIT REVERSES (IN PART)

Prince appealed the district court's decision, and in April 2013, the Court of Appeals for the Second Circuit reversed in part, holding that twenty-five of the thirty works were protected under the fair use doctrine and remanding to the district court for a determination under the proper legal standard as to whether the five remaining works were entitled to the same defense.¹³¹

In addressing the first statutory factor and the inquiry "at the heart of" the fair use inquiry, the court noted that the district court had conducted its analysis upon a substantively incorrect legal premise.¹³² The court clarified that, in contrast to the district court's belief, "[t]he law imposes no requirement that a work comment on the original or its author in order to be considered transformative, and a secondary work may constitute a fair use even if it serves some purpose other than those (criticism, comment, news reporting, teaching, scholarship, and research) identified in the preamble to the statute."¹³³ Although many of the seminal "fair use works" did appropriate copyrighted work for the direct purpose of commenting on the

127. *Id.* at 353.

128. *Id.* at 353.

129. *Id.* at 354–55.

130. *Id.* at 355.

131. *Cariou v. Prince*, 714 F.3d 694, 712 (2d Cir. 2013), *cert denied*, 134 S. Ct. 618 (2013).

132. *See id.* at 705–06.

133. *Id.* at 706.

culture those images represented,¹³⁴ a work can still be transformative in the absence of such expressed purpose: it simply “must alter the original with ‘new expression, meaning, or message.’”¹³⁵

The court conducted its analysis by holding Prince’s work side-by-side with Cariou’s and observing the physical differences between the two works,¹³⁶ finding twenty-five of them to be “transformative as a matter of law.”¹³⁷ The court explained that Prince’s composition and his use of color and mixed media altered the fundamental physicality of Cariou’s photographs.¹³⁸ Describing Prince’s works as “crude,” “jarring,” “hectic,” and “provocative,” the court concluded that Prince imbued Cariou’s photographs with new expression—“looking at the artworks and the photographs side-by-side, we conclude that Prince’s images . . . employ new aesthetics with creative and communicative results distinct from Cariou’s.”¹³⁹ Perhaps understanding that its analysis could be taken to suggest that any physical alteration would be sufficient for fair use, the court pulled back to note that its holding applied only to those changes that presented the images with a “fundamentally different aesthetic,”¹⁴⁰ and that its conclusion should not be interpreted to mean that any cosmetic changes to Cariou’s photograph would be sufficient.

The court succinctly addressed the second factor, finding that although it was clear that Cariou’s photographs were creative and published, thus weighing against an overall finding of fair use, this factor is of “‘limited usefulness where,’ as here, ‘the creative work of art is being used for a transformative purpose.’”¹⁴¹

Examining next the amount and substantiality of Cariou’s photographs that Prince used in his works in relation to the whole of Cariou’s works, the court expressed confusion as to how the district court concluded that

134. *See id.* (noting that Warhol’s Campbell’s soup can series and Marilyn Monroe portraits comment on consumer culture and celebrity).

135. *Id.* (quoting *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 579 (1994)).

136. *See id.* at 708. In addition to focusing on the differences in image, the court also discussed the physical difference in the form in which the images were presented. Cariou’s black and white images were printed in book form; Prince presented his works on large canvases, often incorporating color and other additional images to create his collage pieces. *Id.* at 706.

137. *Id.* at 707.

138. *Id.* at 706.

139. *Id.* at 707–08.

140. *See id.* at 708.

141. *Id.* at 710 (quoting *Bill Graham Archives v. Dorling Kindersley Ltd.*, 448 F.3d 605, 612 (2d Cir. 2006)).

Prince's "taking was substantially greater than necessary."¹⁴² Additionally, the court noted, there is no legal prohibition that the secondary artist takes no more than necessary.¹⁴³ And, although Prince appropriated essential portions of Cariou's photographs, in twenty-five of the thirty works, Prince "transformed those photographs into something new and different."¹⁴⁴ This fundamental alteration in the materials' meaning is crucial to informing the weight given the third factor, and the court found this factor to cut heavily in Prince's favor for the twenty-five works the court deemed transformed.¹⁴⁵

Turning to an examination of the effect of the use on the potential market for the copyrighted work, the court dismissed the district court's focus on whether Prince's use had damaged both the actual and potential markets for Cariou's original work.¹⁴⁶ The court noted that it had previously addressed this issue in *Blanch v. Koons*—the question is not whether the potential market is damaged, but whether the secondary work usurped the market of the original work.¹⁴⁷ The court found the audience for Prince's works to be distinct from Cariou's potential audience and that there was "no evidence that Prince's work ever touched—much less usurped—either the primary or derivative market for Cariou's work."¹⁴⁸

With regard to the remaining five works,¹⁴⁹ the court found Prince's alterations not significant enough to allow the court to make a judgment as to whether the works were transformative: "Although the minimal alterations that Prince made in th[e]se instances moved the work in a different direction from Cariou's classical portraiture and landscape photos, we can not say with certainty at this point whether th[e]se [five] artworks present a 'new expression, meaning, or message.'"¹⁵⁰ The court then remanded those five pieces to the district court for a determination under the correct legal standard as to whether the works were transformative or whether they impermissibly infringed on Cariou's copyright.¹⁵¹

142. *Id.*

143. *Id.*

144. *Id.*

145. *Id.*

146. *Id.* at 708.

147. *Id.* (quoting *Blanch v. Koons*, 467 F.3d 244, 258 (2d Cir. 2006)).

148. *Id.* at 709.

149. The remaining works are titled *Graduation*, *Meditation*, *Canal Zone* (2008), *Canal Zone* (2007), and *Charlie Company*. *Id.*

150. *Id.* at 711 (quoting *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 579 (1994)).

151. *Id.* at 710–11. Upon remand to the district court, the parties reached a settlement and dismissed the action. The settlement provides that Prince shall own the disputed works "free and clear of any claim by [Cariou]. . . ." Stipulation of Voluntary Dismissal with

Writing in partial dissent, Judge Wallace noted the inconsistency in remanding only five of the thirty works to the district court for a further determination as to whether they were fair use.¹⁵² Although he agreed with the majority that the district court had incorrectly required that Prince's works comment on Cariou's photographs to be entitled to a fair use defense, Judge Wallace favored remanding the entire case to the district court.¹⁵³ Much of his dissent was tied to his reticence to make an artistic determination of the transformativeness of Prince's works, pointedly noting his "limited art experience."¹⁵⁴ Additionally, and in contrast to the majority, Judge Wallace considered Prince's testimony to be relevant to the transformativeness analysis.¹⁵⁵

D. "SIDE-BY-SIDE" AND TRANSFORMATION

The holding in *Cariou* continues the shift away from authorial intent informing a finding of fair use. In examining the nature of transformation, the court explicitly clarified the relationship between the fair use inquiry and authorial intent:

What is critical is how the work in question appears to the reasonable observer, not simply what an artist might say about a particular piece or body of work. Prince's work could be transformative even without commenting on Cariou's work or on culture, and even without Prince's stated intention to do so. . . . The focus of our infringement analysis is primarily on the Prince artworks themselves¹⁵⁶

After examining the question of transformation, the court examined the other three factors as dependent on the answer to the former question. And even within the analysis of the first factor—addressing “whether [the] use is of a commercial nature”—the court defaulted to the formulation in *Campbell*. Since *Campbell* recognized that commercial uses were not presumptively unfair, the more transformative a work, the less commercialism weighs

Prejudice, *Cariou v. Prince*, 784 F. Supp. 2d 337, (S.D.N.Y. 2011), *rev'd*, *Cariou v. Prince*, 714 F.3d 694 (2d Cir.), *cert denied*, 134 S. Ct. 618 (2013) (No. 1:08-cv-11327), ECF No. 141.

152. *Cariou*, 714 F.3d at 713 (Wallace, J., dissenting) (“I fail to see how the majority in its appellate role can ‘confidently’ draw a distinction between the twenty-five works that it has identified as constituting fair use and the five works that do not readily lend themselves to a fair use determination.”).

153. *Id.* at 712.

154. *See id.* at 714.

155. *Id.* at 713.

156. *Id.* at 711 (majority opinion) (internal citations omitted).

against a finding of fair use.¹⁵⁷ Therefore, in *Cariou* “[a]lthough there is no question that Prince’s artworks are commercial, [the court did] not place much significance on that fact due to the transformative nature of the work.”¹⁵⁸ The second factor was dealt with in much the same manner: although Cariou’s photographs were creative,¹⁵⁹ “this factor ‘may be of limited usefulness where,’ as here, ‘the creative work of art is being used for a transformative purpose.’”¹⁶⁰ The third factor—the amount and sustainability of the copyrighted work used—follows as well: “[t]he third-factor inquiry must take into account that the extent of permissible copying varies with the purpose and character of the use.”¹⁶¹ In other words, the amount of permissible copying is dependent on what the artist does with the material. If the use is transformative, then copying, both in quality and in substance, is generally more permissible.

Although the shift towards a visual comparison of two works will likely result in a more permissive atmosphere for appropriation artists in all mediums to create heterodox works, it falters when a court is asked to address works that gain their transformative nature from new expression that is intrinsically linked to the exact copying of an original work. In the context of this Note, the most appropriate examples might be Prince’s untitled cowboy works.¹⁶² Prince’s commentary on the hyper-masculine image of the American male would arguably have been lost in the process of substantially altering the images. Prince’s images, though, would run afoul of the *Cariou* standard, where the question of transformation is intertwined with sufficient alteration of the physical. It is the height of irony that in formulating a test that at first glance appears to create a standard allowing almost any substantive physical modification to an original work to influence a fair use determination, the court has in fact laid down a reductive and restrictive doctrine that removes from protection those works that are arguably most transformative in their emotional effect on the audience.

157. *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 579 (1994).

158. *Cariou*, 714 F.3d at 708.

159. For an interesting exploration of photography and copyright, see Hughes, *supra* note 119.

160. *Cariou*, 714 F.3d at 710 (quoting *Bill Graham Archives v. Dorling Kindersley Ltd.*, 448 F.3d 605, 612 (2d. Cir. 2006)).

161. *Id.*

162. One could also imagine a counterfactual history in which Duchamp had chosen to not sign *The Fountain* and simply submit the work as it was. The contextual presentation of the work in the gallery might still affect an understanding of the urinal as more than simple utilitarian object, which was arguably Duchamp’s exact point. See *supra* note 13 and accompanying text.

E. MISUNDERSTANDING THE EXISTING MARKET

The court's consideration of the relationship of transformativeness to the fourth factor is similar. Although not explicitly driving the consideration of the market harm, the court clarifies that the question of market usurpation versus market suppression turns in large part on the question of a finding of transformation. Citing precedent for the importance of examining whether the target market of the secondary use is the same as the target market for the original, the court remained "mindful that the more transformative the secondary use, the less likelihood that the secondary use substitutes for the original, even though the fair use, being transformative, might well harm, or even destroy, the market for the original."¹⁶³

In addressing the harm to Cariou's market, the court bifurcated what one would consider the market for Cariou's work into two distinct camps—those persons with the financial means to acquire Prince's work, and those without. The court recited a list of celebrities invited to a dinner the Gagosian held in concert with the *Canal Zone* opening.¹⁶⁴ It used this as evidence that "Prince's work appeals to an entirely different sort of collector than Cariou's," and that the markets were distinct.¹⁶⁵ Although the logic in this statement fails,¹⁶⁶ by happenstance, the court's conclusion that Prince's work did not displace Cariou's holds. The crucial query is whether the derivative work acts as partial substitution for the original. Absent an evidentiary finding that this is the case, it then logically follows that the consumer views the two products as distinct and thus serving a different purpose. And although the court obsessed over the low selling price of Cariou's work as indicative of Cariou's work existing in a separate market from Prince's, the true importance of this evidentiary inquiry lies elsewhere. The court touched upon it when it wrote, "nothing in the record suggests that anyone will not now purchase Cariou's work, or *derivative non-transformative works* (whether Cariou's own or licensed by

163. *Cariou*, 714 F.3d at 709 (internal citations omitted).

164. *Id.* For the curious, the guest list included, among others, musicians Jay-Z and Beyonce Knowles, artists Damien Hirst and Jeff Koons, professional football player Tom Brady, model Gisele Bundchen, *Vanity Fair* editor Graydon Carter, *Vogue* editor Anna Wintour, authors Jonathan Franzen and Candace Bushnell, and actors Robert DeNiro, Angelina Jolie, and Brad Pitt. *Id.*

165. *Id.*

166. Bifurcating or, more accurately, stratifying a market into segments based on the wealth of the those persons purchasing artwork in that market ignores the fact that those purchasing Prince's works also have the means to purchase Cariou's work. Although a cursory appropriation of income distribution models indicates that Cariou's customers are likely unable to possess the means, assuming there exists a desire, to purchase Prince's work, there is no resulting implication that the markets are distinct.

him) as a result of the market space that Prince's work has taken up."¹⁶⁷ The problem with this analysis is exposed not by the twenty-five works found to be transformative, but by the five works remanded to the district court. If we assume those five works are *derivative non-transformative works*, then, by the court's analysis, these five works should substitute in the market for Cariou's works.¹⁶⁸ But in predicating the fourth-factor market analysis on the different values placed on the two artists' respective works, the court committed itself to a market analysis that viewed the respective audiences as distinct simply because of the prices of the artists' works. This cannot hold. If Prince's work is non-transformative and thus acts as a substitute for Cariou's photographs, it, by definition, touches the same primary market for Cariou's work.

III. SYNTHESIZING ECONOMIC AND SOCIAL THEORIES TO MODIFY THE FAIR USE INQUIRY TO BETTER COMPORT WITH COPYRIGHT PRINCIPLES

Reframing the analysis of the fourth-factor market inquiry to inform, rather than follow, the determination of transformation would give a court substantive findings upon which to ground its analysis of the purpose and character of the use. Rather than a court inferring insignificant market harm because a work is transformative, a work should be considered transformative precisely because there is insignificant actual market harm. This follows because insofar as the fourth factor turns on the distinction between complementary and substitutional copying¹⁶⁹—i.e., transformative and superseding copies—a lack of market impairment can indicate that the audience has determined that the secondary use is complementary.¹⁷⁰ The question that remains is how to determine when there is market harm. Here, theories ported from the social sciences can indicate when the public views a work as complementary—i.e., insignificant market harm—and when it views a work as substitutional—i.e., significant market harm. Although reversing the direction of implication appears to be a subtle shift, it is one that could have profound effects on how fair use is analyzed.

167. *Cariou*, 714 F.3d at 709 (emphasis added).

168. This is simply the contrapositive to the idea that “the more transformative the secondary use, the less likelihood that the secondary use substitutes for the original.” *Id.*

169. *See Ty, Inc. v. Publ'ns Int'l Ltd.*, 292 F.3d 512, 518 (7th Cir. 2002).

170. *See id.* at 522 (“Factor (4) at least glances at the distinction we noted earlier between substitute and complementary copying, since the later does not impair the potential market or value of the copyrighted work . . .”).

A. THE FOURTH FACTOR'S FALL

Prior to *Campbell*, the Supreme Court had unambiguously stated that the fourth factor—the effect upon the potential market—was “undoubtedly the single most important element of fair use.”¹⁷¹ And although, post-*Campbell*, the fourth factor has remained the single factor most closely correlated with an overall finding of fair use, it has been for a markedly different reason. Rather than informing the outcome of the overall inquiry by informing the analysis of the other three factors, the fourth factor “essentially constitutes a metafactor under which courts integrate their analyses of the other three factors and, in doing so, arrive at the outcome not simply of the fourth factor, but of the overall test.”¹⁷²

In arguing that the first factor is the “soul of the fair use,”¹⁷³ Pierre Leval also contended that the Supreme Court had overstated the importance of the market factor.¹⁷⁴ He argued that, although in cases where the secondary use substantially interfered with the market for the original work the fourth factor should weigh heavily against a finding of fair use, “the inverse does not follow.”¹⁷⁵ Leval’s article was persuasive. In *Campbell*, the Court repudiated its earlier language in *Harper & Row*, writing, “All [four statutory factors] are to be explored, and the results weighed together, in light of the purposes of copyright.”¹⁷⁶ The effect on fair use jurisprudence was considerable. Prior to *Campbell*, over half (fifty-nine percent) of the fair use opinions explicitly cited *Harper & Row* for the proposition that the fourth factor—the effect of the use on the market—was “undoubtedly the single most important element of fair use.”¹⁷⁷ After *Campbell* ruled that all the factors were to be explored holistically,¹⁷⁸ only around one quarter of opinions continued to state the fourth factor was the most important.¹⁷⁹

171. *Harper & Row, Publishers, Inc. v. Nation Enters.*, 471 U.S. 539, 566 (1985).

172. Beebe, *supra* note 10, at 617.

173. Leval, *supra* note 29, at 1116.

174. *See id.* at 1124.

175. *Id.* (“The fact that the secondary use does not harm the market for the original gives no assurance that the secondary use was justified.”).

176. *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 578 (1994).

177. Beebe, *supra* note 10, at 616–17 (citing *Harper & Row, Publishers, Inc. v. Nation Enters.*, 471 U.S. 539, 566 (1985)).

178. *See Campbell*, 510 U.S. at 578.

179. Beebe, *supra* note 10, at 617.

B. UNDERSTANDING THE USES AND LIMITATIONS OF ECONOMIC THEORY IN A FAIR USE ANALYSIS

Underlying the market inquiry of the fourth factor is the basic theory of supply and demand. Copyright effectively grants an individual a monopoly over the market for her work. The right to exclude others from the market through the rights granted in § 106 ensure that additional supply neither impinges the copyright owner's ability to profit from her creation, nor decreases the incentive for an individual to create future works.

Economic theory characterizes copyright law as a cure for market failure that stems from the existence of “public goods” characteristics inherent in artistic expression.¹⁸⁰ The problems associated with these characteristics, most notably the inability to exclude free riders, result in public goods being under-produced if left to the mechanics of an unregulated market.¹⁸¹ When a transaction that would be beneficial to both parties does not occur, this breakdown is known as market failure. In totality, the legal system often establishes parameters intended to limit occurrences of market failure.

In this economic system, fair use exists as a corrective to inefficiency in copyright transactions.¹⁸² There are three main circumstances where the fair use doctrine comes into play.¹⁸³ First, it provides a remedy for situations where high transaction costs exist and normalized market forces are inadequate to effect an agreement between two parties.¹⁸⁴ Fair use is also important for matters where implied consent—for example, the industry practice of book reviews quoting part of the original material—indicates an acceptance of the need for greater consumer information and the confidence that, in not needing to gain the favor of the author to reprint passages, the reviewer remains objective.¹⁸⁵ Finally, fair use exists to allow the creation of “productive uses.”¹⁸⁶ This productive use can take many forms—for

180. See Wendy Gordon, *Fair Use as Market Failure: A Structural and Economic Analysis of the Betamax Case and its Predecessors*, 82 COLUM. L. REV. 1600, 1610 (1982). A public good contains two general defining traits: first, supply is effectively inexhaustible; and second, persons cannot readily be excluded from use of the good. *Id.* at 1610–11.

181. See *id.* at 1611.

182. See generally *id.*; William M. Landes, *Copyright, Borrowed Images and Appropriation Art: An Economic Approach*, 9 GEO. MASON L. REV. 1 (2000–2001); Richard Posner, *When Is Parody Fair Use?*, 21 J. LEGAL STUD. 67 (1997); William Landes & Richard Posner, *An Economic Analysis of Copyright Law*, 18 J. LEGAL STUD. 325 (1989).

183. See Landes, *supra* note 182, at 10.

184. *Id.*

185. See *id.*

186. *Id.*

example, parody or satire¹⁸⁷—and rests on the transformation of the original work into a work that is unlikely to substitute in the market for the original work or create substantial harm to what otherwise would be a lucrative licensing market.¹⁸⁸ There can be substantial overlap between the three categories, but any one is justification for fair use existing to create a more efficient and rational market.

The examination of the market harm under the fourth statutory factor focuses on two markets: the immediate market for the work in question and the secondary market.¹⁸⁹ The test for harm in the primary market rests on the alleged infringing work superseding the first work.¹⁹⁰ Harm resulting from the destruction of the market for the original work is different; there is no privilege for the original artist to capitalize on her product being in the market, only the right to access the market free of a substitute work diminishing the size of the market.¹⁹¹

The secondary market is more complicated, since it necessarily involves a hypothetical projection of the likelihood of that work being the subject of licensing desires. The secondary market implicates a circular analysis—a work has licensing value if it is used in the secondary work, but the value is dependent on the transformativeness of that secondary work. Additionally, the use in a secondary work is often dependent on the absence of licensing costs associated with the use. And in the absence of a standard licensing practice such as those employed by AP or Getty Images, calculating the lost licensing cost can be nearly impossible. Finally, the identity of the secondary artist can significantly alter the potential value of the secondary work, and thus alter the negotiations between the copyright holder and the potential licensee.¹⁹² Although this may simply engender an economic solution based

187. The *Campbell* Court defined both parody and satire. *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 579 (1994). *But see Archer Vice: Southbound and Down* (FX television broadcast Feb. 24, 2014) (arguing that “nobody really knows” what satire is).

188. *See* Landes, *supra* note 182, at 10.

189. *See Campbell*, 510 U.S. at 590–93; *Harper & Row, Publishers, Inc. v. Nation Enters.*, 471 U.S. 539, 568 (1985) (“Th[e fourth factor] inquiry must take account not only of harm to the original but also of harm to the market for derivative works.”).

190. *Campbell*, 510 U.S. at 590–93.

191. This differentiates between full substitute works, which, by being identical to the original work, will infringe and partial substitute works, which are more likely to be transformative.

192. For a real-world example of the issues in determining licensing harm, consider the suit brought by French photographer Henri Dauman against Andy Warhol’s estate for allegedly infringing a photograph of Jackie Kennedy that first appeared in *Life Magazine* in 1963. Although Warhol had used the image as source material a few months after her husband’s assassination in November 1963, Dauman only became aware of the use in the mid-1990s, when one of Warhol’s *Jackie* works sold at Sotheby’s for \$418,000. Although the

on principles of supply and demand, the likely outcome in most cases is the overvaluing of the original work by the copyright owner, thus resulting in market failure.¹⁹³

In many ways, an economic approach to copyright would allow appropriation art to flourish in much the same way that a robust fair use regime based upon social context theories of reception would. However, this is mainly an ex post analysis of the economic rationale for preferences society has already approved. In some cases, the economic analysis fails to account for societal preferences for expression, while in others it fails to account for an irrational market. The former will be explored in the following section; for the latter, *Rogers v. Koons*¹⁹⁴ provides a useful example. Although a pure economic exploration indicates that the outcome should have been avoided by Koons paying a small fee to license the image he used as basis for his sculpture, this contention often does not hold up when confronted with standard real-world barriers. If economic theory is to provide assistance in favorably adjusting the current fair use inquiry, it will only be as a supplement to additional theories.

C. SOCIAL SCIENCE THEORIES OF CONTEXTUAL ENGAGEMENT

If the underlying goal of the fair use exemption is to further the progress of the arts by providing the public with greater access to transformative works, then the audience's reaction can be instrumental in determining whether a work is transformative. If it is granted that the audience is composed of divergent evaluations, it is inarguable that it will contain varied opinions of what a work is expressing. This implies that everything is variably transformative; logically, then, the concept of transformation cannot be a binary. Instead, the relevant question in a fair use inquiry is not whether an alleged infringing work is transformative or not, but to what degree the work is transformative, and whether this is sufficient to favor fair use.¹⁹⁵ Returning to *Campbell* for an example, the relevant question was "whether a parodic

case settled before a judicial ruling, Dauman's complaint asked for a finding of copyright liability and for damages. *Dauman v. Andy Warhol Found. for Visual Arts, Inc.*, No. 96 CIV.9219, 1997 WL 337488, at *1 (S.D.N.Y. June 19, 1997). This elicits two questions. First, is the value of the license determined at the moment of infringement, or at post-sale of the work? If the former, then any loss of licensing revenue to Dauman would likely have been extremely minimal, as, although Warhol's works sell for millions today, in 1964 they were of little value. If the license value is determined upon sale of the work, then we are effectively punishing an artist for creating a secondary work that the public believes to exist independently from the original work.

193. See Landes, *supra* note 182, at 11.

194. *Rogers v. Koons*, 960 F.2d 301 (2d Cir. 1992).

195. See Heymann, *supra* note 19, at 449.

character may reasonably be perceived.”¹⁹⁶ If the relevant responder to that question is properly considered the public, and not the judge substituting her own beliefs for the public, then social science theories can assist in discerning the public’s reaction to the artwork in question.

Divorcing the audience’s understanding of the existence and purpose of this examination from an analysis of the transformativeness of a work reduces the inquiry to a facial examination of the physical differences between two works. Although this differentiation between the physical can provide a window into the transformativeness of a work, it is not necessary,¹⁹⁷ nor should the law consider it sufficient.

Adjusting the inquiry from one that attempts to divine purpose through authorial statements to one that focuses on audience interpretation will still allow authorial intent to influence the examination. But rather than burden judges with the task of discerning intent by holding two works side-by-side, the audience can accept either the stated rationale of an artist or infuse a work with a new collective meaning. This ability to infuse a work with a meaning different from the artist’s original intent recognizes the power of the audience to determine a work’s true transformative nature.¹⁹⁸ Meaning is arguably contextual, and a judge experiences a work in a different context than any other individual. This then implies that the judge’s experience of the work is unique, and potentially not representative of the larger audience. Consider, for example, Koons’s *Banalities* show. Removing his sculpture, *String of Puppies*, from the context of an exhibition entitled *Banalities* diminishes the meaning of the work as a critical object.¹⁹⁹ The same is true of Prince’s use of Cariou’s photographs—audience engagement is predicated on the context of the encounter with the work. It is within this context that the meaning of the work is transmitted from author to audience. The context can amplify, diminish, or simply distort the author’s intent. Although the author can place her artwork within a certain context—for example in a gallery²⁰⁰ or on the sides of buildings²⁰¹—much of the time the work is subject to engagement in

196. *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 582 (1994).

197. *See* SPECTOR ET AL., *supra* note 15.

198. *See* William W. Fisher III, Frank Cost, Shepard Fairey, Meir Feder, Edwin Fountain, Geoffrey Stewart & Marita Sturken, *Reflections on the Hope Poster Case*, 25 HARV. J.L. & TECH. 243 (2012).

199. It is difficult to believe that a person walking into the show would find Koons’s piece to have developed a similar meaning to Art Rogers’s photograph. Simply the name of the show would likely give some indication that Koons was commenting on the banality of Rogers’s puppy photograph.

200. For example, Koons’s *Banalities* show at Sonnabend Gallery.

201. For example, Banksy’s street art.

myriad circumstances.²⁰² Divorcing the work from the artist alters the discourse that exists surrounding that work, and recasts the audience's interaction with the work in view of what the audience perceives to be the new "truth."²⁰³ But under the test set forth in *Cariou*, a court should give no weight to this fact.²⁰⁴

D. MEASURING THE VALUE OF THE ENGAGEMENT

Extrapolating theories of contextual engagement to a fair use inquiry will only assist if the court can discern some method of measurement. To this end, the market can provide a guide. As shown in *Cariou*, the values the market placed on the two artists' respective works differed greatly. But where the court in *Cariou* determined the absence of market usurpation followed from the transformative nature of Prince's artworks, examining the issue from a theory of contextual engagement changes the form. Instead, a court examining the same case under the new proposal to reinvigorate the market-harm inquiry as the dominant factor in a fair use inquiry would determine that the transformative elements of Prince's work could only have followed the creation of a dialogue around the work that was distinct from the one that formed around Cariou's photographs. The different market values for the works provide evidence that Prince's work was not acting as a substitute for Cariou's work. If it had, economic theory would suggest that the prices of the two works would be identical, or close to identical.

202. One notable example of a work adopting divergent meanings in different contexts is Shepard Fairey's *Hope* poster. Adopting an image from an Associated Press ("AP") photographer, Fairey cropped the image, made color and other adjustments to the image, and eventually ended up with the iconic image that spread across the country in 2008. Its lasting impact on culture will be its influence as a political poster, but within that context it resonates deeply with cultural interaction with the political. The poster draws upon various sources of inspiration—including Soviet agitprop political posters, Warhol's pop-art exploration of celebrity, traditional notions of photographic dignified power, and 1980s populist street art—to create a singular image that harmonized these disparate meanings. The contextual presentation of the poster can highlight one or more of these influences, allowing the viewer to ascribe his own thoughts into the meaning, and transforming the piece accordingly. This can also be examined in the subsequent adoption of the image into a textual reference for numerous other images—positive and negative, sincere and ironic—all of them referencing Fairey's poster and not the underlying AP image. For a comprehensive treatment of the poster and the litigation surrounding it see Fisher et al., *supra* note 198.

203. For an example, consider the case of *The Education of Little Tree*, discussed in Heymann, *supra* note 19, at 459.

204. See *Cariou v. Prince*, 714 F.3d 694, 707 (2d Cir.), *cert. denied*, 134 S. Ct 618 (2013) ("Rather than confining our inquiry to Prince's explanations of his artworks, we instead examine how the artworks may reasonably be perceived in order to address their transformative nature. The focus of our infringement analysis is primarily in the Prince artworks themselves . . .").

The court's suggestion that the market segments for the two artists were distinct from one another fails to understand that an artwork does not form distinct from the author. Although the author has limited control over how the audience engages with her work, the audience can ascribe an artist's brand onto a creation. This understanding is essential to a conceptualization of the alteration of expression through appropriation.²⁰⁵ When Richard Prince appropriates an existing work, he imbues that work with his brand, one that has been cultivated through his career and is recognized by the public as distinctive. The market value of his work is partially a simple representation of that recognition. Prince's work is distinct, and therefore transformative, because the market—i.e., the public—has recognized it as so.

This Note does not purport to imply that monetary value is the only true representation of the true worth of a work of art. Quite often, the most influential works are those that are initially rejected by the public. But, as Justice Holmes warned, judges should not be the arbiters of taste.²⁰⁶ In all but a very small subset of cases, which we can assuredly count on judicial common sense to sniff out, the copyright holder is not harmed by a secondary use that implicates First Amendment concerns or authorial interests. In the vast majority of fair use litigation, it is best to listen to what the public is indicating it values.

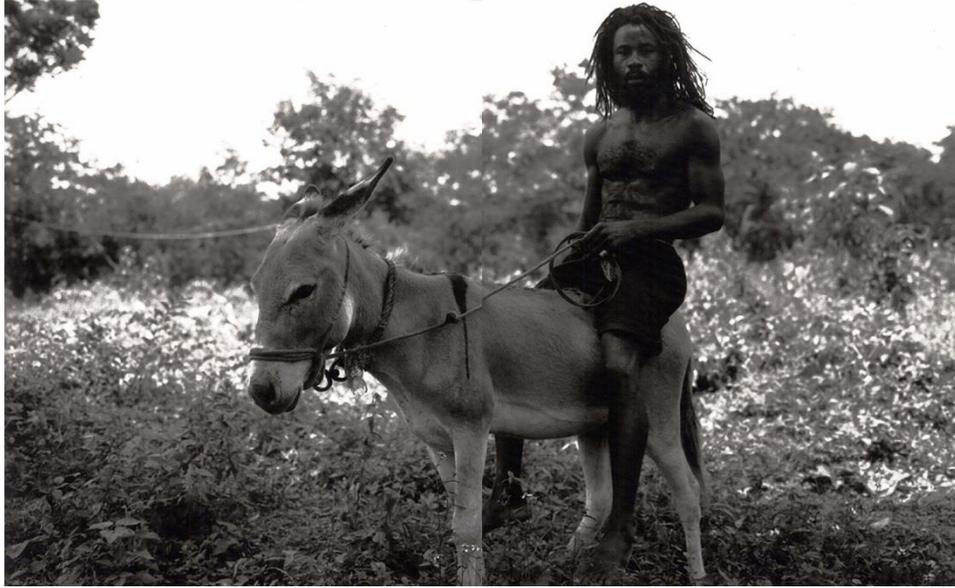
205. Consider the case of Damien Hirst's *The Physical Impossibility of Death in the Mind of Someone Living*. Ostensibly nothing more than a shark submerged in formaldehyde, in 2004 the piece sold for \$12 million. To understand the sale price, it is instructive to examine what differentiated Hirst's work from any other shark submerged in formaldehyde. Hirst's shark was not the first: in 1989, two years prior to Hirst creating *Physical Impossibility*, a man named Eddie Saunders displayed a shark on the wall of his electrical shop in London. When, in 2003, Saunders displayed his shark at the Stuckism International Gallery and advertised his shark for sale at a steep discount from the price for Hirst's piece, he received no offers. Saunders displayed his piece under the title, *A Dead Shark Isn't Art*. And the market decided that in his case, he was correct. Hirst's shark was evaluated differently. Even at the genesis of the piece in 1991, Hirst already possessed a reputation as a leading figure in what would be known as the Young British Artists, having curated multiple lauded exhibitions and impressed the influential Charles Saatchi with his installation piece *A Thousand Years*. When Cohen purchased Hirst's shark in 2005, he was buying not only a shark or the expression of Hirst's idea of this single work, but also what Hirst as a brand contributed to the public's valuation of the work. For more information on the creation and subsequent history of Hirst's work, see DON THOMPSON, *THE \$12 MILLION STUFFED SHARK: THE CURIOUS CASE OF CONTEMPORARY ART* (2008).

206. See *Bleistein v. Donaldson Lithographing Co.*, 188 U.S. 239, 351 (1903).

IV. CONCLUSION

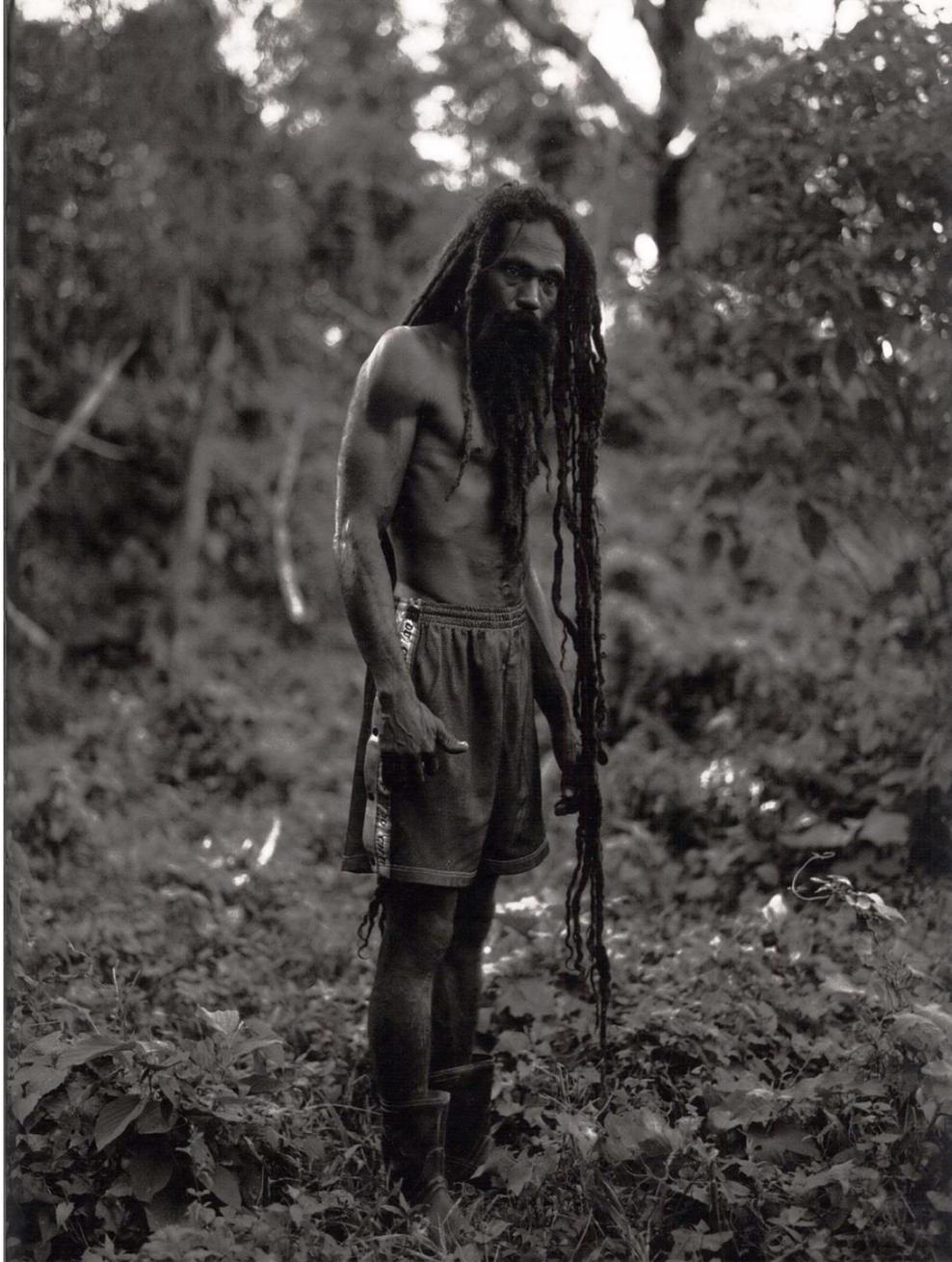
Since the first judicial decision that addressed copyright and fair use in the area of appropriation art, courts have struggled with the conceptual underpinnings of the artistic form. In sum, the judiciary has done admirably, often expanding its understanding of the fair use doctrine in order to serve the core goal of copyright—to promote the arts. But in doing so, it has potentially travelled down a rabbit hole. The focus on transformation itself is not the issue; the concept has proven useful as a malleable term of art for judges to explore different conceptions of the purpose and character of the use under the first statutory factor. However, the recent decision in *Carion v. Prince* indicates that transformation might be exclusively found in physical alteration. The *Carion* transformation test divorces artwork, especially appropriation artwork, from an individual's contextual and experiential engagement with the artwork. It forces a judge to engage as a critic. Instead of continuing down this path, courts should reorient themselves and allow the public to indicate the transformative nature of a work. Courts can do this by examining social theories of contextual engagement in concert with fundamental market principles to determine actual market harm. This determination can then inform the question of transformation. The effect is to return the power to determine what is in the public interest to the public.

APPENDIX



PATRICK CARIOU, YES RASTA 83–84 (2000).

Richard Prince, *Back to the Garden* (2008).



PATRICK CARIOU, YES RASTA 118 (2000).



Richard Prince, *Graduation* (2008).

**THE MURKY WATERS OF FIRST SALE: PRICE
DISCRIMINATION AND DOWNSTREAM CONTROL
IN THE WAKE OF *KIRTSAENG V. JOHN WILEY &
SONS, INC.***

S. Zubin Gautam[†]

Woven into the fabric of U.S. intellectual property law is the fundamental tension between providing incentives for creative innovation and facilitating access to the fruits of that innovation. As widely acknowledged as that tension may be, the policy considerations that shape the law run a significant risk of succumbing to the illusion that a sustainable balance between incentives and access has been struck. Indeed, to the naïve observer, the U.S. Constitution’s Intellectual Property Clause¹ might appear to provide a clean mechanism for society to benefit from innovation. But a moment’s consideration reveals that the Framers’ chosen means of granting limited monopolies to innovators countervails their desired end of progress, at least inasmuch as “progress” includes broad access to the products of innovation.

Given its presence at the inception of American legal doctrine, this inherent tension has unsurprisingly permeated the debates that have followed in U.S. copyright law.² The result has been a perpetual tug-of-war between innovators’ desire to capture the economic benefits of their labor and the public’s desire for ready access to their creations. In economic terms, this struggle is simply an instance of the basic conflict between the welfare interests of the supply side and those of the demand side.

Copyright’s first sale doctrine represents a tug of the rope toward the demand side by limiting a copyright holder’s exclusive right to public distribution of his works.³ In brief, the doctrine provides that once a

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1. U.S. CONST. art. I, § 8, cl. 8 (empowering Congress “To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries”).

2. See, e.g., Glynn S. Lunney, Jr., *Reexamining Copyright’s Incentives-Access Paradigm*, 49 VAND. L. REV. 483 (1996).

3. See 17 U.S.C. § 109(a) (2012). Within the broader context of intellectual property law, including the patent and trademark regimes, the first sale doctrine may be viewed as part of the larger doctrine of “exhaustion” of intellectual property rights. See, e.g., *Michael V.*

consumer purchases or otherwise lawfully obtains a copy of a copyrighted work, she may dispose of that particular copy as she pleases.⁴ In addition to expressing the law's general disfavor of restraints on alienation, the first sale doctrine promotes the broad dissemination of copyrighted works.

On March 19, 2013, in its landmark 6-3 decision in *Kirtsaeng v. John Wiley & Sons, Inc.*, the U.S. Supreme Court clarified the geographic scope of the first sale doctrine.⁵ The key question before the Court was whether U.S. copyright law's first sale doctrine constitutes a regime of "national exhaustion"—whereby the doctrine's limitation of the distribution right applies only to *domestically manufactured* goods—or one of "international exhaustion"—whereby the limitation applies to *all* copyright-protected goods, regardless of their origin of manufacture.⁶ The Court ushered in a regime of "international first sale," holding that the scope of the first sale doctrine is not limited to goods manufactured within the United States.⁷ Specifically, the Court held that, under the first sale doctrine, defendant Supap Kirtsaeng, a university student who had imported into the United States and resold textbooks that were lawfully manufactured and purchased abroad, did not violate the U.S. copyright owner John Wiley & Sons' exclusive right to distribution of the books.⁸

The importance of this geographic scope of the first sale doctrine springs from the desire of copyright-holding suppliers such as John Wiley & Sons to effect geographic price discrimination—the practice of charging different prices for identical products based on the geographic region in which the sale occurs—with a view toward increasing profits. Under the international first sale framework established in *Kirtsaeng*, however, copyright law allows enterprising parties such as Kirtsaeng to engage in international arbitrage: copyright-protected goods manufactured abroad can now be lawfully purchased at low prices abroad, imported into the United States, and resold at prices that undercut those of the U.S. copyright holder.⁹ The resulting competition would ostensibly thwart suppliers' attempts to engage in geographic price discrimination. At first glance, such enhanced competition might be expected to result in lower prices for U.S. consumers, considering

Sardina, Introduction, *Exhaustion and First Sale in Intellectual Property*, 51 SANTA CLARA L. REV. 1055, 1055–57 (2011).

4. 17 U.S.C. § 109(a).

5. 133 S. Ct. 1351 (2013).

6. *See id.* at 1355.

7. *See id.* at 1355–56.

8. *See id.* at 1356–58.

9. *See id.* at 1370–71.

that the United States is often situated among the highest-priced regions in global geographic price discrimination schemes.¹⁰

But to regard the *Kirtsaeng* decision as a clear-cut victory for free trade and consumer welfare would be shortsighted, for it would fail to account for suppliers' and rights holders' likely *responses* to the Supreme Court's adoption of international first sale. Indeed, from an economic welfare perspective, balancing the costs and benefits of price discrimination is an exceedingly difficult and context-dependent task. As with any economic analysis, much of the complexity of policy determinations in this area stems precisely from the fact that one must consider how economic actors will respond to any proposed policy regime.

In the wake of the decision, U.S. rights holders will likely seek alternative means of price discrimination and downstream control of copyright-protected goods. As a collateral effect, implementation of these alternative means will likely usher in a more rapid transition from "traditional" media to digital media as the preferred vehicle for distribution of goods, where possible. Indeed, there are three potential facilitators of price discrimination that are especially amenable to the digital marketplace: digital rights management technologies, distribution of goods via license rather than sale, and distribution of goods via download rather than physical media. Copyright holders can use these approaches to regain the geographic price discrimination abilities lost under *Kirtsaeng*, but these approaches also facilitate significantly more downstream control than the mere ability to prevent arbitrage by importers.

Precisely due to this heightened degree of downstream control, these "digitally amenable" approaches to price discrimination imperil the fundamental policies of free alienability of chattel and broad access to copyrighted works that underlie the first sale doctrine itself.¹¹ Thus, these threats of digital distribution to the first sale doctrine reveal that some of the exuberance among consumer advocates after *Kirtsaeng* may be premature.¹²

10. See *infra* notes 87–89 and accompanying text.

11. This proposition is hardly novel, and in fact Professor Asay has already discussed these issues, albeit more briefly, in the specific context of the *Kirtsaeng* decision. See generally Clark D. Asay, *Kirtsaeng and the First-Sale Doctrine's Digital Problem*, 66 STAN. L. REV. ONLINE 17 (2013).

12. The following quote provides a colorful example of such a reaction to the decision, albeit in the context of a more balanced assessment of the implications of *Kirtsaeng*: "Perhaps territoriality was not long for this world anyway, given the rise of the Internet, of e-books, and of cheap book scanners. But the Supreme Court just kicked it into a well while screaming 'THIS IS FIRST SALE!'" James Grimmelmann, *Grimmelmann: Issues in Kirtsaeng 'Significant'*, PUBLISHERS WEEKLY (Mar. 20, 2013), <http://www.publishersweekly.com/>

Because the transition to digital distribution will likely bring to the fore much of copyright law's incongruity with the digital environment, *Kirtsaeng*'s real impact may be to intensify legal debates surrounding the first sale doctrine rather than to resolve them.

Part I of this Note provides statutory and case-law background on the first sale doctrine and the related importation right leading up to the *Kirtsaeng* decision, as well as basic concepts and terminology related to price discrimination. Part II summarizes the Supreme Court's *Kirtsaeng* decision. Part III continues by discussing policy considerations surrounding price discrimination, emphasizing the necessity of context-specific considerations when assessing the welfare effects of promoting or impeding price discrimination. Part IV analyzes the strategies that suppliers will likely employ in response to the *Kirtsaeng* decision in order to preserve some form of geographic price discrimination. These include both "traditional" approaches suitable for distribution of physical goods, as well as strategies particularly suited to distribution in digital formats. These latter strategies avoid significant costs imposed by the more traditional approaches and afford a high degree of control over redistribution of digital goods beyond the ability to effect geographic price discrimination. Accordingly, they will likely provide incentives for suppliers to shift to digital distribution models. Part V concludes by arguing that these "digitally amenable" strategies and the attendant shift to digital distribution raise many of the same policy concerns that influenced the Supreme Court's rejection of a geographical limitation on the first sale doctrine. As such, *Kirtsaeng* has not given the final word on price discrimination or the status of the first sale doctrine.

I. BACKGROUND: THE FIRST SALE DOCTRINE, THE IMPORTATION RIGHT, AND BASICS OF PRICE DISCRIMINATION

A. THE FIRST SALE DOCTRINE AND THE IMPORTATION RIGHT

U.S. copyright law grants rights holders five basic exclusive rights to original works of authorship, the most salient of which, for the purposes of this Note, is the exclusive right to public distribution of copies of a

[pw/by-topic/digital/copyright/article/56444-grimmelman-issues-in-kirtsaeng-too-significant-to-end-with-supreme-court.html](http://www.berkeleytechlawjournal.com/by-topic/digital/copyright/article/56444-grimmelman-issues-in-kirtsaeng-too-significant-to-end-with-supreme-court.html); see also Gary Shapiro, *Supreme Court Gives American Consumers Victory Over Copyright Owners in Kirtsaeng v. John Wiley & Sons*, FORBES (Mar. 20, 2013), <http://www.forbes.com/sites/garyshapiro/2013/03/20/supreme-court-gives-american-consumers-victory-over-copyright-owners-in-kirtsaeng-vs-john-wiley-sons>.

copyrighted work by sale, other transfer of ownership, rental, lease, or lending.¹³

The first sale doctrine, encoded in § 109(a) of the Copyright Act of 1976 (“1976 Act”), limits a copyright owner’s § 106(3) exclusive right to public distribution, providing that “the owner of a particular copy or phonorecord lawfully made under this title . . . is entitled, without the authority of the copyright owner, to sell or otherwise dispose of the possession of that copy or phonorecord.”¹⁴ The doctrine has its origins in the Supreme Court’s 1908 decision in *Bobbs–Merrill Co. v. Straus*, wherein the Court held that upon an initial sale of goods, a copyright holder had fully “exercised the right to vend,” and accordingly the copyright statute of the day granted the owner no further right to restrict future sales of the goods.¹⁵ From a policy perspective, the first sale doctrine expresses the law’s general disfavor of restraints on alienation.¹⁶ Further, the doctrine acts to promote broad access to and preservation of copyrighted works, to enhance transactional clarity, and to facilitate future innovation.¹⁷

The first sale doctrine as established in *Bobbs–Merrill* and statutorily encoded in § 109(a) clearly limits a copyright owner’s exclusive right to public distribution, but the doctrine’s impact on the owner’s closely related § 602(a) exclusive right to control importation of goods¹⁸ remained unclear until the Supreme Court’s decision in *Kirtsaeng*. Section 602(a)(1) provides that any importation of copyright-protected goods—whether lawfully made or not—without the copyright owner’s permission constitutes “an infringement of the

13. 17 U.S.C. § 106(3) (2012) (granting a copyright holder the exclusive right “to distribute copies or phonorecords of the copyrighted work to the public by sale or other transfer of ownership, or by rental, lease, or lending”). The other four exclusive rights are the rights “to reproduce the copyrighted work in copies or phonorecords,” 17 U.S.C. § 106(1); “to prepare derivative works based upon the copyrighted work,” 17 U.S.C. § 106(2); to perform the work publicly, 17 U.S.C. § 106(4); and to display the work publicly, 17 U.S.C. § 106(5). For sound recordings, rights holders also possess the exclusive right “to perform the copyrighted work publicly by means of a digital audio transmission.” 17 U.S.C. § 106(6).

14. 17 U.S.C. § 109(a).

15. 210 U.S. 339, 351 (1908).

16. *See, e.g.*, *Kirtsaeng v. John Wiley & Sons, Inc.*, 133 S. Ct. 1351, 1363 (2013) (discussing “the common law’s refusal to permit restraints on the alienation of chattels” as part of the first sale doctrine’s “impeccable historic pedigree”); Herbert Hovenkamp, *Post-Sale Restraints and Competitive Harm: The First Sale Doctrine in Perspective*, 66 N.Y.U. ANN. SURV. AM. L. 487, 493 (2011) (“The first sale doctrine grew out of the common law’s strong policy against restraints on alienation . . .”).

17. *See, e.g.*, Aaron Perzanowski & Jason Schultz, *Digital Exhaustion*, 58 UCLA L. REV. 889, 894–901 (2011).

18. 17 U.S.C. § 602(a).

exclusive right to distribute copies or phonorecords” granted by § 106(3).¹⁹ The open question leading up to *Kirtsaeng* was whether or to what extent § 109(a), which limits § 106(3), in turn provided a limitation on the § 602(a) prohibition of unauthorized importation.²⁰

Prior to *Kirtsaeng*, the Supreme Court had addressed this question in *Quality King Distributors, Inc. v. L'anza Research International, Inc.*²¹ The plaintiff in *Quality King* was a U.S. manufacturer of hair care products, the packaging for which included copyrighted labels.²² The defendant, a distributor, lawfully acquired the plaintiff's products through another distributor in Malta.²³ The defendant distributor subsequently imported the hair care products into the United States and resold them at discount prices substantially below the retail price charged for the plaintiff's products in U.S. salons.²⁴ The plaintiff sued for copyright infringement of its distribution and importation rights based on the labels affixed to its products, and the defendant distributor claimed that its importation was protected by the first sale doctrine.²⁵ The Supreme Court held that § 109(a) did apply to extinguish a copyright owner's right to control importation, reasoning that violations of the § 602(a) importation right are simply particular instances of violation of the § 106(3) distribution right.²⁶ Therefore, the Court held, the first sale doctrine limits § 602(a).²⁷ Phrased as such, it may appear that *Quality King* completely settled the applicability of the first sale defense to the importation right.

However, an important factual peculiarity of the case left the door open for some uncertainty regarding the precise scope of that applicability: the goods at issue in *Quality King* had been manufactured in the United States, exported with authorization of the copyright owner, purchased abroad, and finally re-imported to the United States and resold.²⁸ In other words, the

19. 17 U.S.C. § 602(a)(1). Three types of unauthorized importation are exempt from infringement liability under § 602(a)(1): importation for government use, importation for private use by the individual importer, and importation for educational or religious purposes. 17 U.S.C. § 602(a)(3)(A)–(C). These exemptions notwithstanding, any importation of goods that are themselves infringing—including “piratical” goods created in violation of the copyright holder's exclusive right to reproduction under § 106(1)—constitutes an infringement of the § 106(3) distribution right. 17 U.S.C. § 602(a)(2).

20. *Kirtsaeng*, 133 S. Ct. at 1354–55.

21. 523 U.S. 135 (1998).

22. *Id.* at 135.

23. *Id.*

24. *Id.*

25. *Id.*

26. *Id.* at 149–50.

27. *Id.*

28. *See id.* at 154 (Ginsburg, J., concurring).

plaintiff's copyright-protected labels had made a "round trip," beginning with their manufacture in the United States and ending with their importation into the United States by the defendant. By contrast, in *Omega S.A. v. Costco Wholesale Corp.*,²⁹ the Ninth Circuit faced a similar case of unauthorized importation with a crucial distinguishing feature—the goods at issue, watches engraved with a U.S.-copyrighted design, were manufactured in Switzerland rather than in the United States.³⁰ The Ninth Circuit distinguished *Quality King* from existing Ninth Circuit precedent and held that the first sale doctrine did not protect the importation of goods that had been manufactured abroad.³¹ Although the Supreme Court affirmed the Ninth Circuit's decision in *Omega*, the Court split 4–4 on the decision, leaving the holding without binding precedential effect outside the Ninth Circuit.³²

B. THE BASICS OF PRICE DISCRIMINATION

The chief practical importance of the interaction between the first sale doctrine and the importation right is its effect on the ability of producers of copyrighted goods to effectively implement price discrimination. Price discrimination is an economic strategy wherein a supplier divides the market for identical (or substantially similar) goods into segments, charging a different price for the good to consumers within each market segment.³³ The supplier seeking an economically efficient strategy will, of course, only attempt to engage in such price discrimination if it will yield a higher profit than would a strategy of uniform pricing across the market.³⁴ Even if price discrimination is desirable to a supplier, the strategy will prove useless to him unless he can effectively prevent arbitrage—the practice of purchasing the good in a lower-priced market segment and then reselling it at a profit in a higher-priced market segment. Presumably, if arbitrage is permitted, competition from arbitrageurs will drive the price for the entire market down to that of the lowest-priced segment.³⁵ In other words, it is essential that the

29. 541 F.3d 982 (9th Cir. 2008), *aff'd by an equally divided court*, 131 S. Ct. 565 (2010).

30. *See id.* at 983–84.

31. *Id.* at 987–90. More precisely, the Ninth Circuit held that § 109(a) "provide[s] no defense to an infringement action under §§ 106(3) and 602(a) that involves (1) foreign-made, nonpiratical copies of a U.S.-copyrighted work, (2) *unless* those same copies have already been sold in the United States with the copyright owner's authority." *Id.* at 983; *see also infra* notes 50–52 and accompanying text.

32. *See Costco Wholesale Corp. v. Omega S.A.*, 131 S. Ct. 565 (2010).

33. *See, e.g.*, William W. Fisher III, *When Should We Permit Differential Pricing of Information?*, 55 UCLA L. REV. 1, 3 (2007). This Note will also use the terms "market segmentation" and "market division" to refer to price discrimination.

34. *See id.*

35. *See id.* at 3–4.

would-be price discriminator be able to keep his market segments firmly divided.

Price discrimination can be implemented in diverse ways, both with respect to the criteria under which market segments are divided and with respect to the means of maintaining their division.³⁶ The particular form at issue in the *Kirtsaeng* decision is *geographic* price discrimination. Plaintiff John Wiley & Sons divided the market for its textbooks by selling them at different prices in different geographic regions of the world, and it sought to maintain this division by prohibiting importation and exportation of its books between these regions.³⁷ The importation of foreign-manufactured goods protected by U.S. intellectual property rights without the authorization of the rights holder is known as “parallel importation,” and the resale market in the United States for such goods is commonly referred to as the “gray market.”³⁸ Of course, the goal of gray-market resellers is to engage in arbitrage; effectively, the Supreme Court’s decision in *Kirtsaeng* permits arbitrage via the U.S. gray market, at least with respect to copyright law.

36. *See id.* at 4. Economists generally characterize price discrimination schemes as either “first-degree,” “second-degree,” or “third-degree” price discrimination based on the criteria by which the supplier segments the market. In first-degree price discrimination, which is rarely practically implementable, the supplier segments the market into individual consumers, charging each consumer the maximum price she is willing to pay for the supplied good. In second-degree price discrimination, the supplier segments the market according to “hidden” consumer pricing preferences, inducing consumers to reveal their preferences through purchasing decisions. A quintessential example of second-degree price discrimination is “versioning”—the practice of offering similar but distinct versions of a good, such as business-class and economy-class airplane tickets, at different prices. Finally, in third-degree price discrimination, the supplier segments the market according to “overt” consumer characteristics that ostensibly correspond to consumers’ pricing preferences. For example, the supplier might charge different prices based on the age group or geographic location of the consumer. *See id.*

37. *See Kirtsaeng v. John Wiley & Sons, Inc.*, 133 S. Ct. 1351, 1356 (2013). Geographic price discrimination is, as noted above, a form of “third-degree” price discrimination. *See supra* note 36.

38. To be more precise, gray market goods are goods *lawfully* manufactured and obtained abroad and subsequently imported without the rights holder’s authorization; thus, gray-market goods are distinguished from goods whose foreign manufacture or procurement constituted infringement prior to importation. *See, e.g.*, Michael Stockalper, Note, *Is There a Foreign “Right” of Price Discrimination Under United States Copyright Law?: An Examination of the First-Sale Doctrine as Applied to Gray-Market Goods*, 20 DEPAUL J. ART TECH. & INTELL PROP. L. 513, 520 (2010) (citing *Quality King Distribs., Inc. v. L’Anza Research Int’l, Inc.*, 523 U.S. 135, 153 (1998)).

II. INTERNATIONAL FIRST SALE: *KIR TSAENG V. JOHN WILEY & SONS*

The Supreme Court in *Kirtsaeng* framed the issue before it as whether or not the phrase “lawfully made under this title” in § 109(a) worked a geographic limitation into the first sale doctrine.³⁹ In a 6-3 decision, the Court held that it did not, at last establishing that the first sale doctrine applies to the importation of all lawfully made and lawfully obtained copyrighted goods, including those manufactured abroad.⁴⁰

A. FACTS AND PROCEDURAL HISTORY

Plaintiff John Wiley & Sons, Inc. (“Wiley”) is a publisher of academic textbooks.⁴¹ Wiley assigns to its subsidiary John Wiley & Sons (Asia) Pte Ltd. (“Wiley Asia”) the rights to publish, print, and sell foreign editions of its textbooks outside the United States.⁴² The copies of textbooks published by Wiley Asia are marked with notices forbidding their exportation outside of Europe, Asia, Africa, and the Middle East.⁴³

Defendant Supap Kirtsaeng (“Kirtsaeng”), a native of Thailand who moved to the United States for his undergraduate and graduate studies, devised a gray-market arbitrage scheme for textbooks.⁴⁴ Kirtsaeng arranged for friends and family in Thailand to purchase foreign editions of American textbooks, including books published by Wiley Asia, and to ship those copies to him in the United States.⁴⁵ He then resold the copies in the United States at prices undercutting those of American-manufactured books and retained the residual profits after reimbursing his friends and family.⁴⁶

Wiley filed suit against Kirtsaeng in the Southern District of New York, alleging that Kirtsaeng’s importation and resale of Wiley Asia’s books constituted infringement of Wiley’s § 106(3) exclusive right to public distribution, as well as infringement of Wiley’s § 602(a) right to control importation of copyrighted works.⁴⁷ The district court found for Wiley, holding that Kirtsaeng’s invocation of the first sale defense was unavailing because the doctrine did not apply to copies of copyrighted works

39. *Kirtsaeng*, 133 S. Ct. at 1357.

40. *Id.* at 1355–56.

41. *Id.* at 1356.

42. *Id.*

43. *Id.*

44. *See id.*

45. *Id.*

46. *Id.*

47. *Id.* at 1357.

manufactured abroad.⁴⁸ On appeal, the Second Circuit affirmed the district court's holding, interpreting § 109(a)'s reference to copies "lawfully made under this title" as applying only to copies manufactured within the United States.⁴⁹

The Second Circuit's holding created a split between the circuits. In *Omega S.A. v. Costco Wholesale Corp.*, the Ninth Circuit had previously held that the first sale doctrine did in fact apply to copies manufactured abroad, but only when an authorized first sale occurred *within* the United States.⁵⁰ Thus, in contrast with the Second Circuit's imposition of a geographic restriction on the first sale doctrine, the Ninth Circuit adopted a hybrid "half-geographical/half-nongeographical" approach,⁵¹ under which the scope of the first sale doctrine is restricted to copies either (1) lawfully manufactured within the United States, or (2) lawfully manufactured outside the United States but whose first sale within the United States occurred with the copyright holder's authorization.⁵² Furthering the tension of this split, in *Sebastian International, Inc. v. Consumer Contacts (PTY) Ltd.*, the Third Circuit reasoned that a restriction of the first sale doctrine to copies made within the United States "does not fit comfortably within the scheme of the Copyright Act."⁵³ To resolve the question of the first sale doctrine's applicability to copies made abroad, the Supreme Court granted Kirtsaeng's petition for certiorari.⁵⁴

B. SUPREME COURT ANALYSIS

In his opinion for the Court, Justice Breyer focused on the question of whether the phrase "lawfully made under this title" in § 109(a) imposes a geographic or a non-geographic limitation on the scope of copies to which the first sale doctrine applies.⁵⁵ The Court held the limitation to be non-geographical, so the location of manufacture of copies is irrelevant to determining applicability of the first sale doctrine.⁵⁶ As discussed below, in support of this reading, Justice Breyer first relied on the interpretive canons

48. *Id.*

49. *Id.*

50. 541 F.3d 982, 986 (9th Cir. 2008), *aff'd by an equally divided court*, 131 S. Ct. 565 (2010).

51. *See Kirtsaeng*, 133 S. Ct. at 1360.

52. *Id.* (citing *Denbicare U.S.A. v. Toys "R" Us, Inc.*, 84 F.3d 1143, 1149–50 (9th Cir. 1996)).

53. 847 F.2d 1093, 1098 n.1 (3d Cir. 1988).

54. *See Kirtsaeng v. John Wiley & Sons, Inc.*, 132 S. Ct. 1905 (2012) (granting petition for certiorari).

55. *See Kirtsaeng v. John Wiley & Sons, Inc.*, 133 S. Ct. 1351, 1357 (2013).

56. *Id.* at 1355–56.

of direct textual analysis, legislative intent, and common-law precedent in analyzing the language of § 109(a). He concluded by addressing several significant policy concerns that, according to the Court, weighed in favor of adopting *Kirtsaeng*'s non-geographic interpretation.

1. *Statutory Analysis Under a Literal Textual Interpretation*

Based on the language of § 109(a), the Court rejected Wiley's interpretation of "under this title" as meaning "in conformance with the . . . Copyright Act *where the Copyright Act is applicable*."⁵⁷ As a preliminary matter, Justice Breyer noted that the dictionary meaning of "under," as used in § 109(a), does not denote "where."⁵⁸ More importantly, he noted that—if one were to adopt Wiley's reading of the language—injecting a geographic limitation into the phrase "where the Copyright Act is applicable" would be problematic because it would imply that the Copyright Act does not apply to copies made outside the United States.⁵⁹ Finally, the Court concluded that the Ninth Circuit's hybrid geographical–non-geographical restriction of § 109(a), to copies either (1) made in the United States or (2) made abroad but first sold in the United States with authorization, cannot be reconciled with any consistent definition of copies "lawfully made under this title."⁶⁰ Indeed, Justice Breyer noted that "[a]s a matter of English, it would seem that those five words either do cover copies lawfully made abroad or they do not."⁶¹

2. *Legislative Intent and Common-Law Precedent*

In its analysis of the legislative intent behind the first sale doctrine as encoded in § 109(a) of the 1976 Act, the Court first compared the language of § 109(a) with that of its predecessor in the Copyright Act of 1909 ("1909 Act").⁶² The first sale doctrine provision of the 1909 Act, appearing in Section 41, limits its application to copies "the possession of which has been lawfully obtained."⁶³ The Court declined to read the change from that language to the phrase "lawfully made under this title" as an adoption of a

57. *Id.* at 1358 (internal quotation marks omitted).

58. *Id.* at 1359.

59. *Id.*

60. *Id.* at 1360.

61. *Id.* However, the Court did state that it "[could] understand why the Ninth Circuit may have thought it necessary to add the second part of its definition" of the first sale doctrine's scope. *Id.* The Court noted that without a qualification allowing for goods first sold in the United States with the rights holder's authorization, "[a] publisher such as Wiley would be free to print its books abroad, allow their importation and sale within the United States, but prohibit students from later selling their used texts at a campus bookstore." *Id.*

62. *See id.* at 1360–61.

63. Copyright Act of 1909, ch. 320, § 41, 35 Stat. 1075 (amended 1976).

geographic limitation on the doctrine. Rather, the Court interpreted this change as narrowing the class of parties who may invoke the first sale doctrine. That is, whereas under the 1909 Act any lawful possessor of a copy could invoke the doctrine, under the 1976 Act only a lawful *owner* of a copy may do so.⁶⁴ In particular, the Court noted that, as a result of the changed language, a lessee who may have been protected by the first sale doctrine under the 1909 Act is no longer so protected by § 109(a) of the 1976 Act.⁶⁵

Next, the Court cited the 1976 Act's phasing out of the "manufacturing clause," which had limited the importation of copies manufactured abroad, as evidence of a congressional intent to establish parity between the treatment of copies made in the United States and the treatment of those made abroad.⁶⁶ This policy intent, the Court reasoned, is incompatible with an interpretation of the "lawfully made under this title" language as a geographic limitation on the first sale doctrine.⁶⁷

Finally, the Court relied on the presumption that language should be interpreted consistently when it appears in related sections of a statute.⁶⁸ In particular, the phrase "lawfully made under this title," which appears in other subsections of § 109, as well as in § 110(1), creates an exception to the exclusive rights of performance and display, allowing for unauthorized performance or display by a teacher in face-to-face teaching activities.⁶⁹ The Court noted that reading a geographic limitation into these sections would have undesirable consequences similar to the policy concerns discussed

64. *See Kirtsaeng*, 133 S. Ct. at 1361.

65. *Id.* Notably, the Court did not directly address whether or not the first sale doctrine applies to copies distributed under *licenses* as a general matter. *See* discussion *infra* Section IV.B.2. However, the Court did suggest that the first sale doctrine should apply to copies distributed under a statutory *compulsory* license, because such licenses are provided for in § 115 of "this title." *Kirtsaeng*, 133 S. Ct. at 1361.

66. *Id.* (citing H.R. REP. NO. 94-1476, at 165-66 (1976)).

67. The court noted:

The "equal treatment" principle . . . is difficult to square with a geographical interpretation of the "first sale" clause that would grant the holder of an American copyright . . . permanent control over the American distribution chain . . . in respect to copies printed abroad but not in respect to copies printed in America. And it is particularly difficult to believe that Congress would have sought this unequal treatment while saying nothing about it and while, in a related clause (the manufacturing phase-out), seeking the opposite kind of policy goal.

Id. at 1362 (citations omitted).

68. *Id.*

69. *Id.*

below in Section II.B.3 by prohibiting numerous beneficial uses of copyrighted works in the absence of authorization from the rights holder.⁷⁰

Furthermore, the Court relied on an interpretive canon under which courts “must presume that ‘Congress intended to retain the substance of the common law’” when enacting legislation codifying existing common-law precedent.⁷¹ The Court noted the first sale doctrine’s pedigree as part of the common law’s disfavor of restraints on alienation, as well as its promotion of competition, finding that neither *Bobbs–Merrill*, which introduced the first sale doctrine, nor the general common-law doctrine contained any “geographical distinctions.”⁷²

3. Policy Considerations

In declining to adopt Wiley’s geographically restricted interpretation of § 109(a), the Court considered a “parade of horrors”⁷³ that would potentially contravene the constitutional mandate to “promote the Progress of Science and useful Arts”⁷⁴ if the Court were to accept Wiley’s reading. Specifically, Wiley’s interpretation could potentially impose a significant burden of obtaining permissions—or at least great uncertainty regarding that burden—on institutions that have traditionally relied on the first sale doctrine in their distribution of copies produced abroad, including libraries, used-book dealers, and art museums.⁷⁵ Furthermore, technology companies and retailers who routinely sell and distribute products with many component parts manufactured abroad and subject to copyright protection could face a similar burden in obtaining permission to distribute from copyright owners.⁷⁶ According to the Court, these threats “help explain *why* American copyright law has long applied [the first sale] doctrine.”⁷⁷

By contrast, the dissent—written by Justice Ginsburg, joined by Justice Kennedy, and joined in part by Justice Scalia—downplayed these policy

70. *Id.* For example, the Court noted that if a geographic limitation were read into other subsections of § 109, an automobile owner in America could not display a bumper sticker purchased in Canada without authorization from the copyright owner, and an arcade owner could not perform or display an arcade game manufactured in Japan without similar authorization. *Id.* Moreover, American teachers could not lawfully present foreign-made copies of films in class without rights-holder authorization if a geographic limitation were read into § 110(1). *Id.*

71. *Id.* at 1363 (quoting *Samantar v. Yousuf*, 560 U.S. 305, 320 n.13 (2010)).

72. *Id.* at 1363–64.

73. *See id.* at 1373 (Ginsburg, J., dissenting).

74. U.S. CONST. art. I, § 8, cl. 8.

75. *See Kirtsaeng*, 133 S. Ct. at 1364–65.

76. *See id.* at 1365.

77. *Id.* at 1365–66.

concerns.⁷⁸ Instead, the dissent focused largely on the policy issue of affording copyright owners the right to divide domestic and foreign markets, thereby enabling them to engage in price discrimination shielded from the competitive effects of arbitrage.⁷⁹ In this vein, the dissent cited the Court's treatment of the § 602(a)(1) right to control importation in *Quality King*.⁸⁰ In particular, Justice Ginsburg cited language from *Quality King* specifically suggesting a geographic restriction of the kind that Wiley argued for, namely "that § 602(a)(1) authorizes a copyright owner to bar the importation of a copy manufactured abroad for sale abroad."⁸¹ Justice Ginsburg further focused on the legislative history of the § 602(a)(1) importation ban, rather than that of § 109(a), in support of the dissent's conclusion that Congress did not intend the first sale doctrine to apply to copies manufactured outside of the United States.⁸² Indeed, the dissent argued that the Court's holding in *Kirtsaeng* "reduces § 602(a)(1) to insignificance."⁸³

78. *See id.* at 1373–74 (Ginsburg, J., dissenting) (stating that "[t]he Court's parade of horrors . . . is largely imaginary").

79. *Id.*

80. *Id.* at 1374–76 (citing *Quality King Distrib., Inc. v. Lanza Research Int'l, Inc.*, 523 U.S. 135 (1998)).

81. *Id.* at 1376. Specifically, Justice Ginsburg quoted the following passage from the Court's *Quality King* decision:

If the author of [a] work gave the exclusive United States distribution rights—enforceable under the Act—to the publisher of the United States edition and the exclusive British distribution rights to the publisher of the British edition, . . . presumably only those [copies] made by the publisher of the United States edition would be "lawfully made under this title" within the meaning of § 109(a). The first sale doctrine would not provide the publisher of the British edition who decided to sell in the American market with a defense to an action under § 602(a) (or, for that matter, to an action under § 106(3), if there was a distribution of the copies).

Id. at 1375 (quoting *Quality King*, 523 U.S. at 148).

82. In particular, Justice Ginsburg cited to the House and Senate Committee Reports on the 1976 Act:

Section 602 [deals] with two separate situations: importation of "piratical" articles (that is, copies or phonorecords made without any authorization of the copyright owner), and unauthorized importation of copies or phonorecords that were lawfully made. *The general approach of section 602 is to make unauthorized importation an act of infringement in both cases*, but to permit the Bureau of Customs to prohibit importation only of "piratical" articles.

Id. at 1382 (quoting and citing S. REP. NO. 94-473, at 151 (1975) (emphasis added); H.R. REP. NO. 94-1476, at 169 (1976)).

83. *Id.* at 1378.

In response to the dissent, the Court noted that the cited statement from *Quality King* is “pure dictum.”⁸⁴ And, although conceding that its decision potentially diminished the significance of § 602(a)(1), the Court gave examples of situations where the importation ban would still apply, all involving importation by parties who are not “owners” of the goods at issue.⁸⁵ In response to the dissent’s assessment of congressional intent, the Court noted that “the historical events to which [the 1976 Act’s legislative history] points took place more than a decade before the enactment of the Act and, at best, are inconclusive.”⁸⁶ With regard to the more general policy issue of affording the power to effect market division, the Court found no mandate within the intellectual property clause of the Constitution to afford such a power.⁸⁷ The question of whether or not that power should be promoted, according to the Court, should be left to Congress.⁸⁸

III. POLICY CONSIDERATIONS SURROUNDING GEOGRAPHIC PRICE DISCRIMINATION

Before exploring the future implications of the *Kirtsaeng* holding, it is instructive to examine some of the policy considerations surrounding price discrimination. Justice Breyer’s analysis of price discrimination in *Kirtsaeng* was apt in its specificity. That is, instead of adopting a broadly positive or negative view of price discrimination in the abstract, Justice Breyer addressed particular policy concerns that would arise from facilitating the practice through a geographic limitation of the first sale doctrine.⁸⁹ But those underlying concerns remain as relevant after the Supreme Court’s decision as

84. *Id.* at 1368 (“[The cited statement] is dictum contained in a rebuttal to a counterargument. And it is *unnecessary* dictum even in that respect. Is the Court having once written dicta calling a tomato a vegetable bound to deny that it is a fruit forever after?”).

85. *Id.* at 1368. In her concurrence, joined by Justice Alito, Justice Kagan appeared to be more concerned about the diminished significance of the importation ban, but she noted that the Court’s holding was inevitable in light of *Quality King*’s “holding that § 109(a) limits § 602(a)(1).” *Id.* at 1372–73 (Kagan, J., concurring).

86. *Id.* at 1369. This response is somewhat puzzling and not entirely satisfying, given that the dissent cited House and Senate Reports dated from 1975 to 1976 in its analysis of congressional intent. *See supra* note 82.

87. *Kirtsaeng*, 133 S. Ct. at 1370–71 (“[T]he Constitution’s language nowhere suggests that its limited exclusive right should include a right to divide markets or a concomitant right to charge different purchasers different prices for the same book, say to increase or to maximize gain. Neither, to our knowledge, did any Founder make any such suggestion.”).

88. *Id.* at 1371 (“Whether copyright owners should, or should not, have more than ordinary commercial power to divide international markets is a matter for Congress to decide. We do no more here than try to determine what decision Congress has taken.”).

89. *See id.* at 1364–67.

they were before, and accordingly they are crucial to understanding the decision's ramifications in the changed landscape of international first sale.

Much of the twentieth-century legal scholarship addressing price discrimination in the context of copyright law took a decidedly "rosy view" of the practice, and facilitation of price discrimination has sometimes been cast as an unqualified benefit in policy considerations.⁹⁰ However, economists generally agree that in fact the social welfare effects of price discrimination are too complex to analyze in full generality.⁹¹ Thus, price discrimination cannot serve as a self-sufficient justification for a given copyright policy, and any policy analysis must take into account the specific context and collateral effects of the particular price discrimination scheme at issue.

Due to this need for specificity, this Part will restrict attention to the context of price discrimination at issue in *Kirtsaeng*—namely, that of geographic price discrimination and parallel importation. Furthermore, it will be appropriate to particularize further and consider the welfare effects of using a geographic restriction on the first sale doctrine as the means of maintaining market division.

A. GENERAL ECONOMIC SURPLUS CONSIDERATIONS

Although price discrimination unequivocally increases supplier surplus,⁹² the effects of geographic price discrimination on consumer surplus and net surplus are decidedly unclear. A primary argument against geographic price discrimination, and therefore in favor of permitting gray-market activity, comes from a free-trade, consumer-advocacy viewpoint. Simply put, U.S. consumers often find themselves among the highest-priced market segments

90. See, e.g., Michael J. Meurer, *Copyright Law and Price Discrimination*, 23 CARDOZO L. REV. 55, 64 (2001); see also *id.* at 64 n.30 (discussing shortcomings of prior copyright scholarship on price discrimination and noting that, with few exceptions, much of such scholarship failed to "link specific copyright doctrines to price discrimination"); Wendy J. Gordon, *Intellectual Property as Price Discrimination: Implications for Contract*, 73 CHI.-KENT L. REV. 1367, 1369 (1998) (noting that "the tool of price discrimination [had, at the time of writing,] recently been employed as if it were self-justifying").

91. See Fisher, *supra* note 33, at 22 ("[I]t is impossible to say, in the abstract, whether price discrimination increases or decreases aggregate social welfare. Rather, whether it is beneficial from the standpoint of allocative efficiency depends upon the character of the markets that the discriminating firm seeks to keep separate"); Ariel Katz, What Antitrust Law Can (and Cannot) Teach About the First Sale Doctrine 20 (Jan. 23, 2012) (unpublished manuscript) (on file with author), available at <http://ssrn.com/abstract=1845842> ("Differences in local demand may be the outcome of a myriad of reasons, with the result that it is impossible to generalize and determine a priori whether price discrimination should be encouraged or not.").

92. See *supra* note 34 and accompanying text.

in geographic price discrimination schemes,⁹³ and therefore they might enjoy lower prices as a result of heightened competition in the absence of such schemes.⁹⁴ That is, competition from secondary markets created by gray-market arbitrageurs who are able to undercut suppliers' prices should theoretically pressure suppliers to lower their prices in the U.S. market.⁹⁵

The most obvious rebuttal to this argument is that suppliers will not allow it to bear fruit. According to this opposing argument, large-scale gray markets simply cannot sustain themselves for long because suppliers will raise worldwide prices in order to undermine competition from arbitrageurs.⁹⁶ The resulting price increase in lower-income foreign markets—or the abandonment of those markets altogether—will therefore harm consumers in lower-income segments of the supplier's geographic division and result in a deadweight loss.⁹⁷

However, as compelling as this counterargument to the free-trade argument may be, it is not conclusive. Even from the point of view of maximizing global economic welfare—as opposed to focusing on consumer welfare in higher-priced market segments—this argument does not take full

93. See, e.g., David A. Malueg & Marius Schwartz, *Parallel Imports, Demand Dispersion, and International Price Discrimination*, 37 J. INT'L ECON. 167, 191 (1994) (characterizing the United States as a “rich countr[y],” which is likely to “pay relatively high discriminatory prices”).

94. See, e.g., FREDERICK M. ABBOTT, INT'L INST. FOR SUSTAINABLE DEV., *PARALLEL IMPORTATION: ECONOMIC AND SOCIAL WELFARE DIMENSIONS* 6 (2007), available at http://www.iisd.org/pdf/2007/parallel_importation.pdf; Katz, *supra* note 91 at 17.

95. See, e.g., ABBOTT, *supra* note 94, at 6. From a less United States-focused perspective, free-trade advocates have suggested that competition resulting from the gray market may lead to lower worldwide prices. See, e.g., Matthias Ganslandt & Keith E. Maskus, *Vertical Distribution, Parallel Trade, and Price Divergence in Integrated Markets*, 51 EUROPEAN ECON. REV. 943, 944 (2007) (asserting that support for parallel importation essentially rests on “a belief that parallel imports . . . generate competition at the retail level, inducing a tendency toward retail price convergence and pro-competitive gains from price integration”).

96. See Guy A. Rub, *The Economics of Kirtsaeng v. John Wiley & Sons, Inc.: The Efficiency of a Balanced Approach to the First Sale Doctrine*, 81 FORDHAM L. REV. RES GESTAE 41, 47 (2013) (predicting that “if massive international arbitrage is allowed, the price will probably be high worldwide”); Malueg & Schwartz, *supra* note 93, at 190.

97. See Rub, *supra* note 96, at 46; Fisher, *supra* note 33, at 25 (“[P]rice discrimination often, though not invariably, results in a progressive redistribution of wealth . . . because occupants of the lower-margin submarket are often poorer than the occupants of the higher-margin market.”). Economics professors David A. Malueg and Marius Schwartz explain:

If parallel imports are prevented, at least between certain groups of countries, firms could offer lower prices to lower-demand (more elastic) countries without fear of the products resurfacing in high-price markets. Absent such (partial) segmentation, firms may well choose relatively high uniform prices, at which many low-demand countries are likely to go unserved.

Malueg & Schwartz, *supra* note 93, at 190.

account of the effects of income disparities within market segments.⁹⁸ Similarly, although much of the focus of this counterargument is on lower-income markets' becoming underserved, the ethical considerations underlying the counterargument might be complicated by the fact that demand curves can differ between market segments for reasons other than income.⁹⁹

B. GENERAL INTELLECTUAL PROPERTY POLICY CONSIDERATIONS

Within the context of copyright, or of intellectual property rights more generally, proponents of fostering price discrimination by curbing parallel importation also marshal a “copyright maximalist” argument—namely, that any systematic economic benefit that inures to rights holders serves to encourage creativity and innovation.¹⁰⁰ With nothing more, such an argument

98. More precisely, even in the absence of parallel importation, suppliers may deem it economically efficient to sell low volumes of goods at relatively high prices in lower-income market segments, targeting only the wealthiest consumers in those segments. *See* Sarah Wasserman Rajec, *Free Trade in Patented Goods: International Exhaustion for Patents*, 29 BERKELEY TECH. L.J. 315, 363 (2014) (discussing this possibility within the context of patent exhaustion in the pharmaceutical industry); *cf.* Fisher, *supra* note 33, at 25 (noting that price discrimination may result in a “downward” redistribution of wealth that increases social welfare, contingent upon the assumption “that utility curves are randomly distributed within the population of pertinent customers”). In effect, then, it is not immediately clear that shutting down the gray market would increase access to goods for individual lower-income consumers at a global scale. Furthermore, the basic effect of price discrimination on global welfare measured in terms of net surplus is inconclusive; price discrimination may either increase or reduce output and net surplus from a global perspective. *Compare* Meurer, *supra* note 90, at 100 (noting that price discrimination may decrease output and that, even if output increases, overall allocative efficiency may decrease), *with* Malueg & Schwartz, *supra* note 93, at 190 (concluding that, under the constraints of a certain theoretical model, price discrimination may provide a Pareto improvement over uniform pricing, in terms of net surplus).

99. For example, textbook prices in the United Kingdom are significantly lower than in the United States; the price difference has been conjecturally attributed to differences between educational practices in the two countries rather than to any income disparity. *See* Christos Cabolis et al., *A Textbook Example of International Price Discrimination*, 95 ECON. LETTERS 91, 94–95 (2007). Professor Ariel Katz explains:

[P]rice differences may be a function of differences in the cross-elasticity of demand between the product and other products within each country. That is, consumers in countries A and B with the same disposable income might be willing to pay different prices for the same product because they have different preferences for the product given available alternatives.

Katz, *supra* note 91 at 20. Thus, price discrimination may not always function to benefit lower-income markets at the expense of higher-income markets.

100. *See, e.g.*, Meurer, *supra* note 90, at 95 (noting that supporters of expanded copyright protection tend to support price discrimination, because “price discrimination raises profit to copyright owners and attracts more investment to copyright dependent industries”); Rub,

is overly simplistic: it focuses solely on incentives for innovation without considering their effects on society's ability to enjoy the fruits of that innovation. In other words, it addresses only one side of the balance of access and incentives that copyright law seeks to achieve.¹⁰¹ The traditional copyright maximalist argument is simply that price discrimination promotes an ideal balance. To wit, even in situations where price discrimination reduces output and diminishes allocative efficiency, the resulting increase in "dynamic efficiency"—that is, efficient encouragement of innovation—provides a worthy trade.¹⁰² This argument may be countered by the assertion that price discrimination's economic rewards to rights holders can exceed the incentives necessary to promote the production of creative works, and as such price discrimination is simply a form of rent-seeking by copyright holders.¹⁰³ The debate surrounding the access-incentives balance is of course the fundamental economic tension at the heart of copyright law,¹⁰⁴ and it is no more easily settled in the specific context of price discrimination than in general.

Proponents of price discrimination could also argue that a lack of price discrimination will lead to higher prices in lower-income countries, which in turn will lead to increased piracy in those countries to compensate for diminished access to works. Some commentators argue that piracy itself is not unequivocally harmful from the perspective of social welfare because there may be circumstances in which piracy might be an acceptable price to pay for increased access in lower-income countries.¹⁰⁵ However, as a matter

supra note 96, at 46; Gordon, *supra* note 90, at 1368–69 (“Price discrimination increases a producer’s revenues, and thus potentially increases incentives.”).

101. See Gordon, *supra* note 90, at 1369 (noting that price discrimination “can also raise price[s] and reduce quantities, without yielding any incentive payoff large enough to compensate”); Lunney, *supra* note 2, at 492–98 (discussing the basics of the “incentives-access paradigm” in copyright law).

102. See, e.g., Meurer, *supra* note 90, at 98; Fisher, *supra* note 33, at 25; RICHARD A. POSNER, *ANTITRUST LAW* 203 (2d ed. 2001).

103. See, e.g., Gordon, *supra* note 90, at 1369 n.4 (“The increase in incentives is ‘potential’ rather than inevitable, because at some point incentives will be adequate to call forth the desired work, and any further increase in revenues will be pure rent.”); Meurer, *supra* note 90, at 95–97 (arguing that the socially optimal incentive for creation “usually arises at some profit level that is less than expected total surplus” and that “the private incentive created by expected profit can easily exceed the expected social value of a work”); see also *id.* at 100–02 (discussing additional preservation and implementation costs stemming from rent-seeking by copyright holders).

104. See, e.g., Meurer, *supra* note 90, at 98 (“Economists have long understood that an optimal copyright policy balances the dynamic efficiency concerns relating to the incentive to supply works with the allocative efficiency concerns relating to access.”).

105. Cf. Fisher, *supra* note 33, at 36 (asserting that “[p]rice discrimination is bad if it corrodes the spirit of altruistic sharing of ideas and innovations” and noting that “[i]t is

of directing legal policy, it would seem doctrinally distasteful—if not unacceptably self-contradictory—to adopt copyright policy that knowingly encourages infringement. But where such infringement arises as a side effect of economic practices, such as price discrimination or the lack thereof, these deleterious effects must be weighed against competing concerns in the context of the specific copyright policy at issue.

C. POLICY CONCERNS RELATED TO INTERNATIONAL FIRST SALE

The preceding discussion should illustrate that the debate surrounding price discrimination, both in terms of general welfare effects and in terms of copyright law policy, is complex and difficult to resolve. However, focusing further on the question presented in *Kirtsaeng*—namely, whether a geographic limitation on the first sale doctrine is an appropriate mechanism to effect geographic price discrimination—facilitates more concrete arguments.

First, limiting the first sale doctrine to goods manufactured in the United States would introduce a “free-rider” problem: it would turn U.S. copyright law into a source of economic advantage for foreign manufacturers who do not contribute directly to the U.S. economy.¹⁰⁶ That is, foreign suppliers would be able to market their goods in the United States at high prices insulated from the threat of gray-market arbitrage, whereas domestic suppliers would not. As a corollary, and perhaps more importantly, this free-rider effect would create a perverse incentive for U.S. suppliers of copyrighted works to relocate their manufacturing operations abroad.¹⁰⁷

The decisive factor in the Supreme Court’s decision in *Kirtsaeng* could be seen as the desire to avoid the parade of horrors that could result from imposing a geographic limitation on the first sale doctrine—namely, the adverse effects that would arise if libraries, used-book sellers, retailers, and other downstream redistributors were required continually to obtain distribution permissions from copyright holders.¹⁰⁸ Accordingly, *Kirtsaeng* may

reasonably common for intellectual property owners to charge uniform prices for access to their works but then either to provide access for free to (or tacitly to tolerate unauthorized usage by) persons who cannot afford the flat price”).

106. *Cf.* *NEC Elecs. v. CAL Circuit Abco*, 810 F.2d 1506, 1511 (9th Cir. 1987) (“This country’s trademark law does not offer [the plaintiff] a vehicle for establishing a worldwide discriminatory pricing scheme simply through the expedient of setting up an American subsidiary with nominal title to its mark.”); Rajec, *supra* note 98, at 339 (“There is nothing constitutive of patent law that requires protecting the national market for the patent holder’s benefit when the patent holder does nothing for the domestic market in exchange.”).

107. See Melissa Goldberg, Note, *A Textbook Dilemma: Should the First Sale Doctrine Provide a Valid Defense for Foreign-Made Goods?*, 80 *FORDHAM L. REV.* 3057, 3089 (2012).

108. See *Kirtsaeng v. John Wiley & Sons*, 133 S. Ct. 1351, 1364–67 (2013) (“[W]e believe that the practical problems that petitioner and his *amici* have described are too serious, too

have articulated the sound policy decision that, given the uncertain welfare effects of geographic price discrimination, worldwide market segmentation should not be preserved through the means of curtailing the basic “first sale values” of access, preservation, and transactional clarity.¹⁰⁹ However, the decision’s ultimate success in protecting those policy interests at the core of the first sale doctrine is uncertain, given the likely industry response that will follow.

IV. LIKELY INDUSTRY RESPONSES TO *KIRTSAENG*

In the case of the specific parties in *Kirtsaeng*, the basic rebuttal to the consumer-advocacy argument against geographic price discrimination—that gray-market competition will not drive prices down but will simply result in high worldwide prices¹¹⁰—has already played out. In response to the Supreme Court’s decision, Wiley reset its worldwide textbook prices uniformly to match the U.S. price.¹¹¹ But to conclude that such effects will necessarily persist and become prevalent in the wake of *Kirtsaeng*—either within the textbook industry or more generally—is myopic for at least two closely related reasons. First, geographic price discrimination can be implemented by other means than a geographic limitation of the first sale doctrine. Second, methods of price discrimination other than the geographic variety can be exploited by suppliers of copyright-protected goods.

Industry copyright holders will likely respond to the *Kirtsaeng* decision by employing various strategies to preserve price discrimination and prevent parallel importation within the international first sale framework. Some of these strategies are “traditional” in nature, relying on modifications of existing distribution practices for physical goods in order to decrease

extensive, and too likely to come about for us to dismiss them as insignificant . . .”). The Court’s relatively cursory (and perhaps questionable) responses to the dissent’s concerns regarding legislative history and the near irrelevance of the importation ban as a result of the decision suggest that these policy concerns were among the most significant factors in its decision. *See supra* notes 84–86 and accompanying text.

109. *See Kirtsaeng*, 133 S. Ct. at 1371; *see also* *Kirtsaeng v. John Wiley & Sons: Regulatory Arbitrage vs. Market Arbitrage*, ARIEL KATZ ON INTELLECTUAL PROP., COMPETITION, INNOVATION, & OTHER ISSUES (Oct. 29, 2012), <http://arielkatz.org/archives/2130> (arguing that U.S. intellectual property law, and the § 602 importation right in particular, is meant to prevent “regulatory arbitrage” resulting from the lack of harmonization of international intellectual property regimes, rather than “market arbitrage”).

110. *See supra* note 96 and accompanying text.

111. *Preisgestaltung von US-Lehrbüchern [Pricing of U.S. Textbooks]*, WILEY-VCH, (Jul. 10, 2013), <http://www.wiley-vch.de/publish/dt/company/news/archive/19545/> [hereinafter WILEY-VCH].

incentives for parallel importation, or on preventing parallel importation through direct monitoring and enforcement within distribution chains.¹¹² More significantly, however, suppliers are likely to employ other methods particularly applicable to digitally distributed goods, including digital rights management technologies, distribution of goods via license rather than sale, and reliance on a perceived judicial abrogation of the first sale doctrine for digital goods.¹¹³ These “digitally amenable” tactics avoid significant costs imposed by the more traditional strategies for preserving price discrimination, and they are particularly noteworthy because they facilitate price discrimination by securing suppliers a high degree of downstream control, circumventing the first sale doctrine—international or otherwise—altogether.

A. TRADITIONAL DISTRIBUTION STRATEGIES AND DIRECT VERTICAL CONTROLS

As a preliminary matter, even without the assistance of the copyright law, suppliers of copyrighted works can continue to practice geographic price discrimination by manipulating their current distribution practices to render parallel importation unprofitable. Most simply, suppliers might continue to charge different prices in distinct geographic regions but narrow the price gap between geographic market segments to an extent that shipping costs and other expenses would exceed the potential profits to would-be gray-market arbitrageurs.¹¹⁴ However, such a strategy is a compromise for suppliers in the absence of a legally enforceable ban on parallel importation; suppliers’ choices of price differentials between market segments would be dictated by market forces rather than by the suppliers’ own profit-maximization strategies.¹¹⁵

112. See discussion *infra* Section IV.A.

113. See discussion *infra* Section IV.B.

114. Cf. Shubha Ghosh, *An Economic Analysis of the Common Control Exception to Gray Market Exclusion*, 15 U. PA. J. INT’L BUS. L. 373, 377 (1994) (“Advocates of gray marketing . . . ignore the transportation costs associated with cross-hauling goods to another geographic market.”).

115. Nonetheless, even this more limited ability to price discriminate would likely afford suppliers greater profits than uniform worldwide pricing. Thus, especially given that Wiley chose to set worldwide textbook prices at the U.S. market price rather than a recalibrated, profit-maximizing worldwide price, Wiley’s uniform pricing response to *Kirtsaeng* appears at least in part to be more a statement of principled objection to the decision than a long-term strategy. See WILEY-VCH, *supra* note 111. Indeed, the cited German press statement from Wiley characterizes the Supreme Court’s decision as holding that differential geographic pricing of textbooks with essentially identical content is “not lawful.” *Id.* This mischaracterization of the holding as a direct bar on price discrimination rather than a limitation of copyright, in combination with the imposition of a high uniform worldwide

More subtly, suppliers can continue to implement their current geographic differential pricing schemes by using versioning to implement geographic price discrimination.¹¹⁶ That is, suppliers can release distinct versions that are substantially similar but not direct substitutes in different geographic market segments, thereby curbing demand for gray-market versions of their goods.¹¹⁷ This strategy could be effective in industries such as the textbook industry, where successive editions of a given book are already routinely released in sufficiently altered form to eliminate competition from the resale of used books.¹¹⁸ However, for many other goods, such as novels or musical recordings, it is unlikely that suppliers could release distinct versions of a product sufficiently different to eliminate the gray market or other secondary markets.¹¹⁹ Furthermore, even when such distinct versions can be created, effecting geographic price discrimination through versioning would likely impose nontrivial costs on suppliers by forcing them to develop and manufacture the different versions for sale in each market segment.¹²⁰

Suppliers can also prevent parallel importation within their current geographic price discrimination schemes by tightening regulation of their distribution networks through a variety of “vertical control” mechanisms. For example, rights holders might choose to conduct more thorough reviews of their distributors’ and retailers’ sales practices in order to curtail parallel importation through a combination of contractual agreements and more informal business incentives.¹²¹ Such mechanisms are most feasible for

price, might have been intended to encourage opposition to the *Kirtsaeng* decision among foreign consumers.

116. This is an example of using “second-degree” price discrimination to effect “third-degree” price discrimination. *See supra* note 36.

117. *See Rub, supra* note 96, at 45 (predicting, before the *Kirtsaeng* decision, that Wiley itself may choose to implement such a strategy in the event of a victory for *Kirtsaeng*).

118. *See* James E. Foster & Andrew W. Horowitz, *Complimentary Yours: Free Examination Copies and Textbook Prices*, 14 INT’L J. INDUS. ORG. 85, 86–87 (1996). A notable feature of the textbook market that makes it particularly amenable to versioning strategies is that, at least in the U.S. market, students are often constrained to using the particular edition of a textbook selected by their instructor. *Id.* at 88. *But see* Cabolis et al., *supra* note 99, at 95 (noting that in the United Kingdom textbooks are generally treated as supplementary study aids rather than mandatory course materials, so that “students feel much less of an obligation to buy particular books”).

119. *See Rub, supra* note 96, at 45.

120. *See id.*

121. A supplier could presumably examine sales records to ensure that its channel partners are not themselves engaging in parallel importation of the supplier’s goods, and the supplier could also attempt to detect distribution to third parties who are likely to engage in parallel importation. *Cf.* Ganslandt & Maskus, *supra* note 95, at 944 n.4 (noting that “the bulk of parallel trade happens at the wholesale or distributor level,” and accordingly, “empirical evidence points to the vertical-control problem as being central to [parallel importation]”). A

relatively low-volume suppliers, who can directly monitor their distribution networks for gray-market activity without prohibitive cost.¹²² These suppliers could then impose penalties on distributors who engage in or facilitate parallel importation.¹²³ The costs of vigilant direct monitoring of distribution networks are less likely to be manageable for higher-volume suppliers, so this “hands-on” restriction of the gray market may be less tractable for such suppliers.¹²⁴ Some commentators have suggested that high-volume suppliers may still be able to use less finely tailored methods to prevent parallel importation, such as contractually prohibiting distributors from selling to wholesalers outright.¹²⁵ However, in practice these contractual prohibitions would likely be difficult to implement because wholesalers—especially freelance resellers such as Kirtsaeng himself—may be difficult for distributors to detect. Imposing per-customer volume limits on distributors may be somewhat effective in curbing large-scale parallel importation, but, as with other methods of direct vertical control of distribution chains, such a strategy would likely entail significant monitoring and enforcement costs.

All of these strategies to preserve geographic price discrimination within traditional distributional frameworks for physical goods impose nontrivial costs on suppliers, either by constraining suppliers’ choice of prices in a differential pricing scheme or by entailing new production, monitoring, or enforcement costs. Accordingly, industries supplying copyright-protected goods will likely be receptive to alternative means of pursuing their price discrimination goals in the face of international first sale.

B. PRICE DISCRIMINATION STRATEGIES AMENABLE TO DIGITAL DISTRIBUTION

More significantly, suppliers will likely employ price discrimination strategies particularly amenable to digital media. These include digital rights management technologies, distribution of goods under restrictive licensing agreements rather than sales, and a shift toward distribution of copyrighted works over the Internet, in the hope that courts will decline to recognize, or

more extreme approach to controlling the distribution chain would be actual vertical integration. That is, rights holders could actually *acquire* their distributors and thus position themselves to police gray-market activity. *See id.* at 948. Presumably vertical integration, if undertaken as a response to the international first sale regime ushered in by *Kirtsaeng*, would impose significant costs on suppliers who had not previously deemed it efficient.

122. *See* Meurer, *supra* note 90, at 146 (discussing this strategy in the context of software).

123. *See id.*

124. *See id.* at 146 n.399.

125. *See, e.g., id.* at 147 (“A third option is to stipulate by contract with distributors that they shall not facilitate gray market goods.”).

at least severely limit, a “digital first sale right” for downloaded works. Indeed, distribution of music and books via download has been eclipsing physical distribution since before the *Kirtsaeng* decision.¹²⁶ Accordingly, employing strategies that rely on digital distribution will not likely be unduly burdensome for suppliers. Furthermore, as will be discussed below, these strategies avoid some of the significant costs imposed by the more traditional approaches discussed in Section IV.A, *supra*.

Whereas the traditional strategies discussed above proceeded by mitigating the legality of parallel importation, these “digitally amenable” tactics proceed by circumventing the first sale doctrine altogether. As such, they are notable for securing a higher degree of downstream control over copyrighted works beyond the mere ability to prevent parallel importation and arbitrage. Indeed, these digital distribution strategies operate essentially by preventing possessors of lawfully obtained copies from disposing of the copies as they please. Thus, these tactics may serve as incentives for suppliers to hasten the already seemingly inevitable transition to digital distribution of copyright-protected works.

1. *Digital Rights Management Strategies*

If copyright holders cannot rely on a limitation of the first sale doctrine to prevent international arbitrage, it would seem that one of the most direct alternative means would be to render downstream redistribution after a first sale physically impossible or highly impracticable. Although implementing such a strategy is difficult to imagine for most physical goods, it can be achieved to some extent in the digital context through the use of digital rights management (“DRM”) technologies.

a) Tethering and Similar Strategies as Sources of Downstream Control

DRM, also known as technological protection measures (“TPMs”) or trusted systems,¹²⁷ is a category of technologies that allow rights holders to

126. See, e.g., Sam Gustin, *Digital Music Sales Finally Surpassed Physical Sales in 2011*, TIME (Jan. 6, 2012), <http://business.time.com/2012/01/06/digital-music-sales-finally-surpassed-physical-sales-in-2011/>; Clair Cain Miller & Julie Bosman, *E-Books Outsell Print Books at Amazon*, N.Y. TIMES, May 19, 2011, at B2, available at <http://www.nytimes.com/2011/05/20/technology/20amazon.html>; Andrew Albanese, *Judge Deals ‘Used’ E-book Market a Setback*, PUBLISHERS WEEKLY (Apr. 5, 2013), <http://www.publishersweekly.com:8080/pw/by-topic/digital/copyright/article/56701-judge-deals-used-e-book-market-a-setback.html> (“Digital textbooks are gaining rapidly in popularity as tablets like the iPad become standard in education settings.”).

127. See, e.g., Stephen McIntyre, *Game Over for First Sale*, 29 BERKELEY TECH. L.J. 1, 20–21 (2014) (using the term “technological protection measures”); JONATHAN ZITTRAIN, THE

control and restrict the use, modification, and copying of digital goods.¹²⁸ By embedding these restrictions into the goods themselves, DRM affords suppliers of digital goods a high degree of predictable downstream control and thereby facilitates price discrimination, geographic or otherwise.¹²⁹

A prime example of DRM's utility in securing downstream control is the practice of "tethering," wherein a given distributed copy of a digital work is encrypted so that it can be accessed only on particular playback or access devices.¹³⁰ Assuming the encryption technology works as intended, a customer could only transfer such a copy if she also transferred possession of an access device, such as a computer, an mp3 player, or an e-book reader, to which it was tethered. Since she would typically use the device to access a large number of digital works, this would be an impractical method for the customer to transfer a copy of a single work. Thus, effective tethering cuts off the downstream distribution chain after an initial purchase.¹³¹

A slight twist on this tethering practice, for digital works distributed in physical media, is configuring hardware access or playback devices and their accompanying media differently in distinct geographic market segments so that media marketed in one segment are incompatible with hardware sold in other market segments.¹³² A quintessential example of this approach to DRM

FUTURE OF THE INTERNET—AND HOW TO STOP IT 105 (2008) (using the term "trusted systems").

128. Priti Trivedi, Note, *Writing the Wrong: What the E-Book Industry Can Learn from Digital Music's Mistakes with DRM*, 18 J.L. & POL'Y 925, 931 (2010); see Stefan Bechtold, *Digital Rights Management in the United States and Europe*, 52 AM. J. COMP. L. 323, 326–31 (2004) (describing several varieties of DRM systems). This definition of DRM is admittedly vague, and the discussion of DRM in this Note is far from comprehensive. Bechtold provides a more detailed description of specific varieties of DRM systems, and indeed he notes that "DRM" is not a well-defined term. Bechtold, *supra*, at 324 ("[N]o generally accepted definition for the term 'Digital Rights Management' exists.").

129. See, e.g., *id.* at 324 ("Compared to traditional copyright law, DRM promises an unprecedented degree of control over the entire distribution chain and the usage of digital content."); Dan L. Burk, *Legal and Technical Standards in Digital Rights Management Technology*, 74 FORDHAM L. REV. 537, 551 (2005) ("[I]t is the deterministic, bright-line predictability of DRM that makes it an attractive cost-saving mechanism to the copyright holder.").

130. See R. Anthony Reese, *The First Sale Doctrine in the Era of Digital Networks*, 44 B.C. L. REV. 577, 613 (2003).

131. In addition to the heightened degree of downstream control it affords, market division through tethering does not require suppliers to create any content differences between goods sold in distinct market segments, thereby eliminating some of the potential costs of traditional versioning. See *supra* notes 116–119 and accompanying text. Thus, because thwarting the gray market through such a use of DRM does not entail the cost of producing distinct versions of a given good, suppliers will likely find it an attractive additional incentive to shift to digital distribution of copyrighted works.

132. See Fisher, *supra* note 33, at 6.

is the region-coding system used in the DVD standard, which divides the world into six geographic regions; a DVD purchased in the United States, for example, cannot be played on a DVD player distributed in the United Kingdom.¹³³ This compatibility restriction creates distinct geographic market segments, allowing film and television distributors to charge different prices for DVDs in each region.¹³⁴ The region-coding strategy implements geographic price discrimination more directly and provides suppliers with less extreme downstream control than does all-out tethering. That is, rather than aiming to halt all downstream distribution after an initial sale, the region-coding approach allows secondary markets for DRM-protected goods to persist within geographic market segments. For example, although region-coding may curtail the market for U.S.-manufactured DVDs in the United Kingdom, it does little to impede the market for used U.S.-manufactured DVDs within the United States itself.

Finally, “rights locker architectures,” such as the UltraViolet cloud-based authentication and licensing system, provide yet another variant of the tethering strategy.¹³⁵ Instead of tethering use of a copyrighted work to a particular device or devices, rights locker architectures focus on restricting access and usage to particular *users*.¹³⁶ More specifically, a rights locker system is centered around a database that stores consumers’ use and access rights for a particular collection of works. For example, a customer who purchases a movie on an UltraViolet-compatible DVD or Blu-ray disc obtains an UltraViolet authentication code. After registering the code with his account on UltraViolet’s cloud-based database, he can then download a copy of the movie for viewing on an UltraViolet-compatible device or stream the movie through an UltraViolet-compatible website or application. Whatever the means of access, the access device must first “check with” the rights locker database to ensure that the customer has the appropriate rights before he can view the movie.¹³⁷ Although such a rights locker system does little in itself to hamper secondary markets—gray or otherwise—for the original DVD or Blu-ray discs themselves, the additional viewing privileges of downloading or streaming the movie to other devices are tied to the original consumer’s account.

133. *See id.*

134. *Id.*

135. *See* Mark Chacksfield, *UltraViolet: What You Need to Know*, TECHRADAR (Apr. 25, 2012), <http://www.techradar.com/us/news/home-cinema/ultraviolet-what-you-need-to-know-1077658>; *Frequently Asked Questions*, ULTRAVIOLET, <http://www.uvuu.com/faq> (last visited Feb. 18, 2014).

136. Bechtold, *supra* note 128, at 327 n.12.

137. *See* Chacksfield, *supra* note 135.

Thus, provided a consumer's access rights cannot be transferred out of his particular locker, a downstream purchaser of a second-hand physical disc will not enjoy the same ability to download or stream the movie to multiple devices as she would if she purchased a new disc. Accordingly, if the rights locker system can gain sufficient traction to render these ancillary privileges an essential component of the expected consumer experience,¹³⁸ then second-hand discs might become unacceptable as market substitutes for new discs with full access rights.¹³⁹ Thus, the secondary market for discs compatible with the rights locker architecture would be effectively nullified. As in the case of tethering, then, suppliers would be free to engage in price discrimination as they please.

b) Downsides to DRM: Technological Circumvention and Consumer Backlash

DRM theoretically affords suppliers of copyright-protected goods a wealth of opportunities to exert varying degrees of downstream control in order to preserve their existing geographic price discrimination schemes. However, in practice, DRM is far from a fail-safe protection for price discrimination for two primary reasons. First, DRM systems are often not sufficiently robust to resist circumvention of their intended restrictions by technologically adept users. Second, in some cases market forces driven by consumer backlash have led suppliers to abandon or relax DRM protection of their goods.¹⁴⁰

Suppliers facing the prospect of users' technologically bypassing their DRM systems can find some measure of legal comfort in the anti-circumvention provisions of § 1201 of the Digital Millennium Copyright Act ("DMCA").¹⁴¹ Section 1201(a) prohibits the circumvention of any DRM technology that "effectively controls access to" a copyrighted work, as well as

138. Cf. Terence Keegan, *Can Consumers Legally Sell Unused UltraViolet Movie Codes?*, MEDIA & ENTMT SERV. ALLIANCE (Apr. 20, 2012), <http://mesalliance.org/blog/me-daily/2012/04/20/can-consumers-legally-sell-unused-ultraviolet-movie-codes/> ("[I]t seems likely that for now, simply introducing consumers to UltraViolet, and selling them on the benefits of the system, will remain studios' biggest challenges.").

139. The non-transferability of authentication codes (and of access rights themselves) can likely be enforced by license agreements. *See id.*; *see also* discussion *infra* Section IV.B.2.

140. *See, e.g.*, ZITTRAIN, *supra* note 127, at 105 ("Most trusted systems have failed, often because either savvy users have cracked them early on or the market has simply rejected them."); Fisher, *supra* note 33, at 7 (noting that the proliferation of multiregion DVD players and software capable of wiping region-coding restrictions from DVDs have diminished the efficacy of the region-coding system, thereby increasing opportunities for gray-market arbitrage).

141. *See* 17 U.S.C. §§ 1201(a)–(b) (2012).

trafficking in technologies designed to facilitate such circumvention.¹⁴² Similarly, § 1201(b) prohibits trafficking in technologies designed to circumvent any DRM technology that “effectively protects a right of a copyright holder.”¹⁴³

However, as plainly as these provisions of the DMCA may appear to protect DRM technologies against hacking, judicial interpretation of § 1201 has not been uniform.¹⁴⁴ The Federal Circuit has established a framework under which it seems likely that circumvention of tethering DRM for the sole purpose of reselling a tethered copyright-protected good would *not* be prohibited by § 1201.¹⁴⁵ The Ninth Circuit, however, appears to interpret § 1201 as providing absolute protection against circumvention of tethering technologies.¹⁴⁶ This circuit split between the Federal and Ninth Circuits

142. 17 U.S.C. §§ 1201(a)(1)(A), 1201(a)(2).

143. 17 U.S.C. § 1201(b)(1). Notably, § 1201(b) prohibits only trafficking in circumvention devices; it does not prohibit the actual act of circumvention itself. Thus, for instance, a consumer who bypassed a copy-protection DRM encryption on a lawfully purchased Blu-ray disc would not be liable for violation of § 1201(b), although she would be liable if she were to manufacture and sell software for the purpose of bypassing that copy-protection encryption. For the purposes of this Note, however, the most relevant DRM protection measures—tethering, region-coding, and rights locker architectures—all control access to copyrighted works and are thus governed by § 1201(a).

144. A circuit split has resulted from the Federal Circuit’s 2004 decision in *Chamberlain Group, Inc. v. Skylink Technologies, Inc.*, 381 F.3d 1178 (Fed. Cir. 2004), and the Ninth Circuit’s 2010 decision in *MDY Industries, LLC v. Blizzard Entertainment, Inc.*, 629 F.3d 928 (9th Cir. 2010), both discussed in further detail below.

145. In *Chamberlain*, the Federal Circuit introduced a nexus requirement into the analysis of liability for circumvention of access-control DRM technologies. Reasoning that the DMCA’s anti-circumvention provisions “do not establish a new property right,” the court held that § 1201 prohibits only those forms of unauthorized access that “bear a reasonable relationship to the protections that the Copyright Act otherwise affords copyright owners.” *Chamberlain*, 381 F.3d at 1192, 1202.

Under the Federal Circuit’s *Chamberlain* rule, it seems likely that circumvention of tethering DRM for the sole purpose of reselling a tethered copyright-protected good would not be prohibited by § 1201(a), because although resale of the good arguably bears a reasonable relationship to the distribution right under § 106, that right is limited by the first sale doctrine. See McIntyre, *supra* note 127, at 38–39 (discussing the likely permissibility of circumventing tethering for the purpose of reclaiming first sale protections under *Chamberlain*). It is crucial to note that any circumvention of a DRM access control that infringed another § 106 exclusive right—most saliently, the reproduction right—would not benefit from *Chamberlain*’s nexus requirement. Cf. discussion *infra* Section IV.B.3.

146. In *MDY Industries, LLC v. Blizzard Entertainment, Inc.*, the Ninth Circuit explicitly rejected the Federal Circuit’s approach, reasoning that adding an “infringement nexus requirement” for liability under the anti-circumvention provisions would be inconsistent with the plain language of § 1201. *MDY*, 629 F.3d at 950. Instead, the Ninth Circuit interpreted § 1201 as creating an entirely new right against circumvention of access controls for copyright-protected works, independent of whether or not such circumvention infringes any existing right granted by the Copyright Act. *Id.* at 944–45. Under the *MDY* approach,

leaves suppliers with significant uncertainty regarding how effectively they might combat hacking of their DRM protection measures in court, rendering § 1201 a less-than-ideal safeguard against DRM's lack of technological robustness.¹⁴⁷

An equally important concern for suppliers who wish to preserve price discrimination through tethering and similar technological mechanisms is market rejection of restrictive DRM technologies. Consumer resentment of DRM has been widespread in the online music and e-book markets, with tethering-induced “lock-in”—the inability to switch freely between access devices for digital works—serving as a primary source of discontent.¹⁴⁸ This resentment is compounded further by the perception that DRM imposes significant restrictions on lawful purchasers of protected content, while downloaders of pirated copies may enjoy the same content free of those restrictions. Indeed, consumer indignation over the restrictive effects of DRM may actually encourage piracy of copyrighted works.¹⁴⁹ More generally, commentators have suggested that the prevalence of file sharing has created a “culture of free content,” in which users are accustomed to downloading digital media free of cost and restrictions.¹⁵⁰ Presumably, consumers reared on free file sharing would be less inclined to pay for content encumbered by DRM than they would be to convert themselves into lawful purchasers of DRM-free digital media.

Faced with a general disfavor of DRM in the marketplace, some content suppliers have elected to scale back these technological protection measures. Apple's nearly complete abandonment of the “FairPlay” tethering system for music files downloaded from its iTunes store is one of the most prominent

then, tethering technologies are protected by an independent right not limited by the first sale doctrine, and suppliers could invoke § 1201 to safeguard price-discrimination schemes implemented by DRM. In short, the *MDY* rule allows DRM to secure downstream control as an “end-run” around the first sale doctrine, whereas the *Chamberlain* rule does not.

147. See McIntyre, *supra* note 127, at 41–42 (cataloging court decisions following either *Chamberlain* or *MDY* and noting that “[s]ince circumventing tethering technology would likely be lawful under *Chamberlain* but unlawful under *MDY* . . . , it is difficult to make any prediction as to how the controversy might fare in court”).

148. See, e.g., Trivedi, *supra* note 128, at 934; Perzanowski & Schultz, *supra* note 17, at 907 (noting the increasing severity of lock-in and the attendant increase in platform-switching costs).

149. See Trivedi, *supra* note 128, at 934 (citing Nate Anderson, *Landmark Study: DRM Truly Does Make Pirates Out of Us All*, ARS TECHNICA (May 27, 2009), <http://arstechnica.com/tech-policy/2009/05/landmark-study-drm-truly-does-make-pirates-out-of-us-all/> (“DRM is so rage-inducing, even to ordinary, legal users of content, that it can even drive the blind to download illegal electronic Bibles.”)).

150. See *id.* at 955–56.

examples of this flight from DRM.¹⁵¹ It appears that at least some rights holders and online merchants have decided that highly rigid use and access controls over digital media are not necessarily helpful in combating piracy, or at least that such controls are unprofitable when balanced against consumer resistance.¹⁵² But post-*Kirtsaeng*, the need to preserve some form of price discrimination in the face of international first sale—beyond concerns over piracy per se—may give rights holders some pause in jettisoning DRM from their digital distribution strategies.¹⁵³

151. See Peter Cohen, *iTunes Store Goes DRM-Free*, MACWORLD (Jan 6, 2009, 10:40 AM), <http://www.macworld.com/article/1137946/itunesstore.html>; *iTunes Store: iTunes Plus Frequently Asked Questions (FAQ)*, APPLE, <http://support.apple.com/kb/ht1711> (last updated Dec. 5, 2012). However, Apple's iTunes store has not completely abandoned DRM protection for music, as "certain music and music videos . . . have not been provided in [the DRM-free] iTunes Plus format from the music label." *Id.*

152. See Trivedi, *supra* note 128, at 945–46. As a specific example, U.K. book publisher Tor Books UK has decided in 2012 to release all of its e-books free of DRM protection largely due to the perception of DRM as "an irritant taking away the flexibility and [readers'] choice of reading device and format." Julie Crisp, *One Year Later, the Results of Tor Books UK Going DRM-Free*, TOR.COM (Apr. 29, 2013, 1:00 PM), <http://www.tor.com/blogs/2013/04/tor-books-uk-drm-free-one-year-later> (internal quotation marks omitted) (noting that "DRM doesn't impede pirates, but it subjects honest customers to a monopoly tightly controlled by the owners of the DRM software," and that many Tor readers and authors have responded enthusiastically to the decision to abandon DRM protection).

But it is important to note that DRM-free e-books are not currently the norm. Indeed, in marked contrast with its large-scale abandonment of DRM protection for music, Apple's iTunes store sells many e-books restricted by DRM. See Kirk McElhearn, *Apple Should Lead the Move to DRM-Free Ebooks*, MACWORLD (Jul. 17, 2013, 3:20 AM), <http://www.macworld.com/article/2044161/apple-should-lead-the-move-to-drm-free-ebooks.html>.

153. Indeed, in the textbook industry in particular, the consumer backlash concerns generally surrounding the use of DRM may be less severe than in the context of digital music or the general market for e-books. To wit, the U.S. market for textbooks consists by and large of a captive audience. Students purchasing textbooks are used to having little to no choice in the precise edition of a book they must purchase for a given class, and in lieu of the "culture of free content" that has arisen around file sharing of music and popular e-books, the norm for consumers of textbooks is arguably one of begrudging tolerance of perceived price gouging. See Foster & Horowitz, *supra* note 118, at 88 (discussing U.S. students' limited choices in purchasing textbooks); Trivedi, *supra* note 128, at 955–56 (discussing the "culture of free content"); John J. Siegfried & Christopher Latta, *Competition in the Retail College Textbook Market*, 17 ECON. EDUC. REV. 105, 105 (1998) ("There is hardly a college or university bookstore manager who has not been vilified at some time by the campus newspaper for price gouging. The usual charge is exploitation of monopoly power by setting high prices for required classroom textbooks."). Accordingly, in the textbook industry, the effects of lock-in through tethering may not faze consumers as much as they have with digital music and other e-books.

If the industry chooses to respond to *Kirtsaeng* by switching to digital distribution models with heavy DRM protection in order to maintain market segmentation, the decision may help to keep DRM a viable force for longer than expected. However, the U.S. textbook

All in all, although tethering and similar DRM-based practices present attractive possibilities for solidifying market segmentation through digital distribution of copyrighted works, concerns over circumvention and market disfavor of these mechanisms suggest that suppliers would be unwise to rely solely on DRM to combat parallel importation in the age of international first sale. Accordingly, whether or not they incorporate DRM into their market segmentation efforts, suppliers will likely seek to shore up their price discrimination strategies with additional legal protections.

2. *Licensing Strategies*

In order to control downstream redistribution and avoid the first sale doctrine's crippling effects on price discrimination, suppliers can employ a contractual strategy distinct from the direct vertical distribution chain controls discussed above in Section IV.A: they can distribute goods under license agreements rather than sales. In short, whereas DRM attempts to thwart the first sale doctrine by making a "second sale" impossible or appropriately restricted as a technical matter, this licensing strategy does so essentially by declaring that no "first sale" actually occurs. More precisely, as encoded in § 109(a), the first sale doctrine provides only that "the *owner* of a particular copy" of a copyrighted work may dispose of her copy as she pleases.¹⁵⁴ Thus, in theory, by designating a customer as a licensee rather than an owner, a supplier may effectively nullify the first sale doctrine by fiat.¹⁵⁵

market is admittedly pathological in the relevant respects, and it is difficult to think of other forms of digital content that would be similarly insulated from consumer backlash against restrictive DRM technologies to the same degree. *Cf.* Cabolis et al., *supra* note 99, at 94–95 (conjecturing potential sources of relatively high textbook prices in the United States, including peculiarities related to the cost and culture of U.S. university education). Furthermore, in order to exploit consumers' current acceptance of constrained access choices for textbooks, the industry would be well advised to implement rigid device tethering before other, more flexible user-access options become the norm. *Cf.* Albanese, *supra* note 126 ("Digital textbooks are gaining rapidly in popularity as tablets like the iPad become standard in education settings."); Motoko Rich, *Print Books Are Target of Pirates on the Web*, N.Y. TIMES, May 11, 2009, at B1, available at <http://www.nytimes.com/2009/05/12/technology/internet/12digital.html> (quoting the chairman of Random House's parent company) ("If iTunes started three years earlier, I'm not sure how big Napster and the subsequent piratical environments would have been, because people would have been in the habit of legitimately purchasing at pricing that wasn't considered pernicious.").

If source markets for parallel importation would not tolerate highly restrictive DRM technologies, the efficacy of tethering as a strategy for preserving geographic price discrimination might decrease significantly. Accordingly, the prediction that *Kirtsaeng* may indirectly enhance the viability of DRM is quite tenuous and concededly speculative.

154. 17 U.S.C. § 109(a) (2012) (emphasis added).

155. *See* Asay, *supra* note 11, at 19 ("In other words, a copyright owner can eliminate first-sale rights by specifying, essentially, that they do not apply.").

The supplier could then insert contractual restrictions on downstream redistribution of the copy into the license agreement as he pleases.¹⁵⁶ In essence, this strategy relies upon judicial recognition of a “license-versus-sale” or “licensee-versus-owner” distinction for the purposes of the first sale doctrine.

As an example, although Wiley’s notices prohibiting export of its Asian textbooks did not withstand the first sale doctrine in *Kirtsaeng*, the theory underlying this licensing strategy posits that Wiley’s notices would have been legally enforceable if they had been terms of a contract under which use of textbooks had been *licensed*, rather than notices on textbooks that had been *sold*. Indeed, there are indications that the Supreme Court’s decision in *Kirtsaeng* has triggered a shift toward a licensing model of distribution among suppliers of copyrighted works.¹⁵⁷

As this example in the context of textbooks illustrates, from a purely theoretical standpoint the licensing strategy may appear to be equally applicable to all varieties of copyrighted works.¹⁵⁸ However, the doctrinal landscape and various practical considerations make digital formats a particularly apt vehicle for avoiding the first sale doctrine through licensing. Having consumers sign license agreements on paper—to say nothing of actually negotiating over such agreements—would be a practical impossibility in the context of mass-marketed goods. But in much of the digital marketplace, distribution of goods under non-negotiable end-user license agreements (“EULAs”) has long been an accepted practice.¹⁵⁹ These EULAs

156. See Reese, *supra* note 130, at 615. By contrast with the contractual controls discussed in Section IV.A, which attempt to exert downstream control at the distribution level, the licensing approach attempts to block further redistribution at the end-user level.

157. See, e.g., *Digital Goods Moving to Licensing Model, Especially after ‘Kirtsaeng,’ SILA Official Says*, 14 WASH. INTERNET DAILY, no. 123, June 26, 2013 (quoting the Software and Information Industry Association’s Senior Vice President of Intellectual Property, who claimed that *Kirtsaeng* is “pushing more companies to look at the licensing model for better or worse, because they don’t have any other options” and that companies are “looking at ways that they change from the selling of textbooks to the licensing” of copyrighted works).

158. Indeed, critics of the license-versus-sale distinction in the context of the first sale doctrine have pointed out that, although restrictive licensing has gained widespread acceptance in the digital marketplace, application of the strategy in markets for more traditional physical goods could lead to upsetting results. See *infra* notes 183–184 and accompanying text.

159. See McIntyre, *supra* note 127, at 16–17 (describing the rise of EULAs in the mass-marketed computer software industry in the 1980s and the continuing prevalence of distribution under EULAs). The widespread acceptance of EULAs in the digital marketplace is the primary reason for which distribution under license is particularly amenable to digital goods. However, licensing strategies, particularly when implemented through “shrinkwrap”

dispense with the inconvenience of traditional signed contracts by declaring that a customer manifests assent to the terms of the license by performing acts as simple as removing the shrinkwrap packaging from a software box, clicking a button marked “I agree” or “continue” on a computer screen, or even simply browsing through a website.¹⁶⁰ As a matter of contract law, courts have generally held such adhesion contracts to be enforceable, and accordingly purveyors of digital goods are able to distribute products under license agreements free from the practical burden of pen-and-paper transactions.¹⁶¹

Case law regarding the efficacy of a licensing end-run around the first sale doctrine is not completely well developed, but it suggests that the strategy may be viable especially for digital media. In the specific context of software, the current trend appears to be for courts to recognize the license-versus-sale distinction, thereby enabling software suppliers to circumvent the first sale doctrine.¹⁶² In particular, the Ninth Circuit’s approach to this distinction should be especially encouraging for suppliers hoping to rely on licensing strategies in the digital context. In *Vernor v. Autodesk*, the Ninth Circuit held that “a software user is a licensee rather than an owner of a copy where the copyright owner (1) specifies that the user is granted a license; (2)

EULAs, are by no means categorically limited to digital goods. *See infra* notes 183–184 and accompanying text.

160. These EULAs are commonly referred to, depending on context, under the apt nomenclatures of “shrinkwrap” and “clickthrough” agreements, as well as the more whimsical but still commonplace “clickwrap” and “browsewrap” agreements. *See, e.g.*, Cheryl B. Preston & Eli W. McCann, *Unwrapping Shrinkwraps, Clickwraps, and Browsewraps: How the Law Went Wrong from Horse Traders to the Law of the Horse*, 26 *BYU J. PUB. L.* 1, 9 (2012) (defining shrinkwrap contracts); *id.* at 17–18 (defining and discussing clickwrap and browsewrap agreements); McIntyre, *supra* note 127, at 16 (using the term “click-through”); Burk, *supra* note 129, at 544 (“The [‘shrinkwrap’ or ‘clickwrap’] license takes its name from the legal fiction that the purchaser demonstrates agreement to the license terms by breaking the ‘shrink-wrap’ cellophane on the product package or, more recently, by using the computer mouse cursor to click on a graphic labeled ‘I agree.’”).

161. The seminal decision establishing the enforceability of shrinkwrap agreements is Judge Easterbrook’s opinion for the Seventh Circuit in *ProCD, Inc. v. Zeidenberg*, 86 F.3d 1447 (7th Cir. 1996) (Easterbrook, J.). Although some measure of notice to the consumer is required for enforceability of shrinkwrap and online EULAs, the standard of clarity for such notice, especially with regard to the specific terms of the license agreement, is not exceedingly high. *See Specht v. Netscape Commc’ns Corp.*, 306 F.3d 17, 35 (2d Cir. 2002) (emphasis added) (“Reasonably conspicuous notice of the existence of contract terms and unambiguous manifestation of assent to those terms by consumers are essential if electronic bargaining is to have integrity and credibility.”); Preston & McCann, *supra* note 160, at 18–19 (discussing the potential for browsewrap agreements with inconspicuous terms to be enforceable).

162. *See* Jenny Lynn Sheridan, *Does the Rise of Property Rights Theory Defeat Copyright’s First Sale Doctrine?*, 52 *SANTA CLARA L. REV.* 297, 299–300 (2012).

significantly restricts the user's ability to transfer the software; and (3) imposes notable use restrictions."¹⁶³ Although the *Vernor* holding applied to software in particular, it appears likely that the Ninth Circuit would recognize the license-versus-sale distinction in a broader context of goods distributed in digital media, particularly those equipped with DRM protections.¹⁶⁴ Essentially, then, *Vernor* invites suppliers ambitiously to exert downstream control: the more strongly a supplier restricts a transfer of goods, the more likely he is to avoid the first sale doctrine.

Thus, under the current Ninth Circuit framework, suppliers seeking to engage in geographic price discrimination may be able to avoid the effects of *Kirtsaeng's* international first sale doctrine by declaring transfers of goods to be licenses and writing geographic transfer restrictions into the license agreements. Indeed, the more restrictive or "notable" those transfer

163. *Vernor v. Autodesk, Inc.*, 621 F.3d 1102, 1111 (9th Cir. 2010). The Ninth Circuit again applied the license-versus-sale framework of *Vernor* in *Apple Inc. v. Pystar Corp.*, where it noted that "[i]t is this distinction between sales and licenses that has caused the use of software licensing agreements to flourish and become the preferred form of software transactions." 658 F.3d 1150, 1156 (9th Cir. 2011). The *Pystar* court rejected a defendant's copyright misuse defense as an invalid "attempt to apply the [f]irst [s]ale [d]octrine to a valid license agreement." *Id.* at 1159.

164. A comparison of *Vernor* with the Ninth Circuit's subsequent opinion in *UMG Recordings v. Augusto*, 628 F.3d 1175 (9th Cir. 2011), highlights why the licensing strategy for circumventing the first sale doctrine is particularly amenable to digital distribution. In *UMG*, the Ninth Circuit held that a record company's distribution of promotional CDs constituted a transfer of ownership rather than a license, in spite of the record company UMG's having placed a label on the CDs declaring that they were distributed under a license. *Id.* at 1177–78. In distinguishing *Vernor*, the court noted that "software users who order and pay to acquire copies are in a very different position from that held by the recipients of UMG's promotional CDs." *Id.* at 1183. Specifying further, the court noted that "UMG has virtually no control over the unordered CDs it issues because of its means of distribution . . ." *Id.* In part, the promotional CDs in *UMG* were distinguishable from the software at issue in *Vernor* because they were sent to recipients without solicitation, *see id.* at 1180–81, but the distinction highlights the importance of the second and third *Vernor* factors of exercising control over use and transfer of the distributed goods. *See supra* note 163 and accompanying text. In this respect, digitally distributed media encrypted with DRM to control use and transfer are more akin to software than promotional CDs. *See* Jennifer Lahm, Note, *Buying a Digital Download? You May Not Own the Copy You Purchase*, 28 *TOURO L. REV.* 211, 213–14 (2012); Meurer, *supra* note 90, at 87 (noting that copyright owners can monitor usage of digital works through technological measures and that "[s]uch metering is not possible for traditional works"). Indeed, under the Ninth Circuit's framework, licensing and DRM can be employed in tandem as "mutually reinforcing" strategies. McIntyre, *supra* note 127, at 42–43. DRM technologies can serve as enforcement mechanisms for use and transfer restrictions contained in the license, and reciprocally, the license agreement may contractually prohibit circumvention of the DRM controls in order to mitigate concerns over the applicability of the DMCA anti-circumvention provisions. *Id.*

restrictions and accompanying DRM enforcement measures are, the more likely a supplier could avoid first sale under *Vernor*.

3. *Shifting Toward Distribution via Download*

Finally, rights holders seeking to avoid the first sale doctrine may hasten the transition to distributing digital media via internet download as opposed to encoding digital works in physical media such as CDs, DVDs, or Blu-ray discs. The essential advantage to suppliers of distribution via download, at least with respect to downstream control, rests on the proposition that any transfer of files over the Internet must at some point involve copying of the original files.¹⁶⁵ Thus, any redistribution by an initial purchaser of a downloaded digital work would implicate the rights holder's exclusive *reproduction* right under § 106 of the Copyright Act.¹⁶⁶ In effect, if this proposition is accepted, the first sale doctrine's limitation of the exclusive right to distribute copyrighted works is irrelevant in the world of distribution via download because the reproduction right indirectly grants the copyright holder absolute control over distribution of her work.

Although case law addressing such a sweeping abrogation of the first sale doctrine for downloaded media is scarce, the Southern District of New York endorsed its approach to digital first sale in *Capitol Records, LLC v. ReDigi Inc.* a mere eleven days after the Supreme Court issued its opinion in *Kirtsaeng*.¹⁶⁷ The case concerned an online marketplace for used digital music files run by defendant ReDigi Inc. ("ReDigi").¹⁶⁸ The marketplace at issue is an example of a so-called "forward-and-delete" system, which attempts in the digital environment to simulate the transfer of physical goods by ensuring that no copy of the digital good is retained by the transferor upon completion of the transaction.¹⁶⁹ The ReDigi service seeks to achieve this simulation by having

165. See 2 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT § 8.12[E] (2013); Reese, *supra* note 130, at 612; Perzanowski & Schultz, *supra* note 17, at 938.

166. See 17 U.S.C. § 106(1) (2012).

167. See *Capitol Records, LLC v. ReDigi Inc.*, 934 F. Supp. 2d 640 (S.D.N.Y. 2013).

168. *Id.* at 645.

169. See *id.* at 645–46; U.S. COPYRIGHT OFFICE, DMCA SECTION 104 REPORT 81–82 (2001), available at <http://www.copyright.gov/reports/studies/dmca/sec-104-report-vol-1.pdf> (defining forward-and-delete systems). However, ReDigi itself does not characterize its online marketplace as a "forward-and-delete" system, contending that its system "pick[s] up those bits that are moving around on your hard drive and . . . move[s] them, literally, a portion at a time, so that what's in the cloud is never at the same time on your device." Matt Peckham, *ReDigi CEO Says the Court Just Snatched Away Your Right to Resell What You Legally Own*, TIME (Apr. 25, 2013), <http://techland.time.com/2013/04/25/redigi-ceo-says-the-court-just-snatched-away-your-right-to-resell-what-you-legally-own/> (interviewing the CEO of ReDigi); see also *ReDigi*, 934 F. Supp. 2d at 645 ("ReDigi asserts that the process involves 'migrating' a user's file, packet by packet—'analogous to a train'—from the user's computer

users upload digital music files to a remote server, called the “Cloud Locker,” and scanning the users’ hard drives to ensure that no copies of the uploaded files remain.¹⁷⁰

Plaintiff Capitol Records, LLC (“Capitol”) holds copyright in numerous recordings sold through ReDigi’s service.¹⁷¹ In granting Capitol’s motion for partial summary judgment and finding direct and secondary infringement of its reproduction and distribution rights, Judge Sullivan held in particular that the first sale doctrine did not apply to ReDigi’s distribution of Capitol’s works.¹⁷² Having held that “the unauthorized transfer of a digital music file over the Internet—where only one file exists before and after the transfer—constitutes reproduction within the meaning of the Copyright Act,”¹⁷³ he found that “as an unlawful reproduction, a digital music file sold on ReDigi is not ‘lawfully made under this title.’”¹⁷⁴

Judge Sullivan further noted that the first sale doctrine grants only “the owner of a *particular* copy or phonorecord” the right to redistribute “*that* copy or phonorecord.”¹⁷⁵ Since, according to Judge Sullivan, the copy of a music file resting in ReDigi’s Cloud Locker for resale was distinct from the copy a user originally purchased and downloaded from iTunes, use of the ReDigi system did not actually constitute resale of the user’s particular copy.¹⁷⁶

Thus, under the *ReDigi* framework, “the first sale defense is limited to *material items*, like records, that the copyright owner put[s] into the stream of

to the Cloud Locker so that data does not exist in two places at any one time.”). Thus, it seems that ReDigi contests the basic proposition that distribution via download necessarily involves copying.

170. More specifically, to sell music through ReDigi’s service, a user would first download a “Media Manager” application to his computer. Media Manager would then scan the hard drive of the user’s computer for music files that were originally purchased either from Apple’s iTunes store or from another ReDigi user. *ReDigi*, 934 F. Supp. 2d at 645. Media Manager would populate a list with these files, and no other files on the user’s hard drive would be eligible for sale through ReDigi’s service. *Id.* The user could then upload any eligible file to ReDigi’s “Cloud Locker,” a remote server, at which point he could choose either to leave the file accessible for his personal use or to offer it for sale. *Id.* at 645–46. If the music file were purchased by another ReDigi user, the original user would lose access to it, with Media Manager continually scanning his hard drive to ensure that he had not retained a copy. *Id.* The new user could then choose to stream the file from the Cloud Locker, resell it, or download it. *Id.* at 646. It is valuable to note that ReDigi’s “Cloud Locker” server stores actual media files, whereas servers in rights locker architectures store only information specifying a user’s access rights. *See supra* notes 135–139 and accompanying text.

171. *ReDigi*, 934 F. Supp. 2d at 646–47.

172. *Id.* at 655–56.

173. *Id.* at 648.

174. *Id.* at 655 (quoting 17 U.S.C. § 109(a) (2012)).

175. *Id.* (quoting 17 U.S.C. § 109(a)).

176. *Id.*

commerce,”¹⁷⁷ and the doctrine is a practical nullity in the context of copyrighted works distributed via download. Under Judge Sullivan’s analysis, the only avenue open for resale of downloaded digital works is the sale of a physical device—for example, a computer hard drive, mp3 player, or e-book reader—onto which the work was lawfully downloaded.¹⁷⁸ Thus, the *ReDigi* holding may have established a kind of “legal tethering” that can be accomplished without the use of DRM. Just as with tethering through technological measures, this legal tethering can drastically curtail downstream redistribution and thereby enable suppliers to engage in price discrimination.¹⁷⁹

177. *Id.* (emphasis added).

178. *Id.* at 656 (presenting the resale of tangible memory devices as a rebuttal to ReDigi’s “feeb[e]” argument that “the Court’s reading of Section 109(a) would in effect exclude digital works from the meaning of the statute”). This outcome is not particularly shocking and was predicted in legal scholarship well before the *ReDigi* decision. *See, e.g.*, NIMMER & NIMMER, *supra* note 165, § 8.12[E]; Reese, *supra* note 130, at 612–13; Perzanowski & Schultz, *supra* note 17, at 904.

179. *See* discussion *supra* Section IV.B.1 (addressing tethering via DRM). Judge Sullivan acknowledged that limiting the purview of the first sale doctrine to redistribution of physical media “clearly presents obstacles to resale that are different from, and perhaps even more onerous than, those involved in the resale of CDs and cassettes,” but he opined that the limitation is “hardly absurd.” *ReDigi*, 934 F. Supp. 2d at 656. However, commentators have disagreed and characterized this limitation on resale as “burdensome and unrealistic.” Perzanowski & Schultz, *supra* note 17, at 904. U.S. case law on the status of the first sale doctrine in the context of forward-and-delete redistribution on the Internet is not well developed. *See ReDigi*, 934 F. Supp. 2d at 648 (noting that “courts ha[d] not previously addressed whether the unauthorized transfer of a digital music file over the Internet—where only one file exists before and after the transfer—constitutes reproduction within the meaning of the Copyright Act”).

Furthermore, at least one European Union decision has held that “intangible copies of computer programs downloaded from the internet” lie within the purview of copyright exhaustion. Case C-128/11, *UsedSoft GmbH v. Oracle Int’l Corp.*, 2012 E.C.R. I-00000, ¶¶ 53–61, available at <http://curia.europa.eu/juris/document/document.jsf?docid=124564&doclang=en>. This distinction from the approach of *ReDigi* is of particular relevance to suppliers seeking to implement geographic price discrimination schemes including European market segments.

As of this writing, ReDigi’s service is still functioning, and Amazon has obtained a patent for a “[s]econdary market for digital objects.” REDIGI, <http://www.redigi.com> (last visited Feb. 18, 2014); U.S. Patent No. 8,364,595 (filed May 5, 2009) (issued Jan. 29, 2013). But, in spite of the uncertainty surrounding digital resale of downloaded goods, *ReDigi* provides a highly encouraging counterpoint to *Kirtsaeng* for suppliers seeking to fend off the threat of the United States’ new international first sale regime, and it raises possibilities of downstream control extending considerably farther than current geographic price discrimination schemes. Indeed, some industry commentators have speculated that, *Kirtsaeng* notwithstanding, the *ReDigi* decision could “portend[] a future without a used textbook market.” Albanese, *supra* note 126.

V. THE PARADE OF HORRIBLES MARCHES ON:
PERSISTING FIRST SALE POLICY CONCERNS AFTER
KIR TSAENG

Given the wealth of available strategies for the exertion of downstream control, especially in the context of digital distribution, suppliers' efforts to engage in market segmentation will likely continue largely unabated, even after *Kirtsaeng's* supposedly crippling blow to geographic price discrimination. In the post-*Kirtsaeng* landscape of price discrimination, many of the already complex social welfare considerations surrounding the practice as discussed in Part III are still in play. Moreover, many of the "digitally amenable" price discrimination strategies discussed in Part IV operate by severely limiting *all* secondary markets—as opposed to the gray market alone—or by eliminating them altogether. Thus, these strategies strike at the core of the first sale doctrine, not only with respect to international trade, but also with respect to the distribution of goods within the United States itself. Accordingly, industry responses to the new international first sale regime will likely increase the focus on a host of additional policy issues surrounding first sale in the digital context. Any impression that *Kirtsaeng* has established lasting certainty regarding the fates of either the first sale doctrine or geographic price discrimination is premature; the decision will most likely serve as a catalyst for more intense debate.

Many of the policy considerations highlighted by Justice Breyer in his opinion for the Court in *Kirtsaeng* will come to the fore as suppliers implement alternative downstream control strategies in response to the decision.¹⁸⁰ Indeed, it is hardly surprising that the parade of horrors feared to result from a geographic limitation on the first sale doctrine could march on even more ominously if rights holders are successful in employing distribution tactics that circumvent the doctrine altogether.¹⁸¹

Restrictive licensing practices have come under particular fire as posing a significant threat of negative externalities. Proponents of the license-versus-sale distinction in the first sale context have characterized the ability to contract around the first sale doctrine as allowing the market to settle efficiently on optimal distribution models.¹⁸² However, particularly if the

180. See *supra* notes 73–77 and accompanying text.

181. See discussion *supra* Section II.B.3; cf. *Kirtsaeng v. John Wiley & Sons, Inc.*, 133 S. Ct. 1351, 1386–90 (Ginsburg, J., dissenting) (arguing that the *Kirtsaeng* majority's policy concerns are sufficiently mitigated by existing copyright law and precedent).

182. See, e.g., *ProCD, Inc. v. Zeidenberg*, 86 F.3d 1447, 1453 (7th Cir. 1996) ("Terms of use are no less a part of 'the product' than are the size of the database and the speed with which the software compiles listings. Competition among vendors, not judicial revision of a

license-versus-sale distinction is applied to physical goods after gaining traction in the digital context, the potential for high transaction costs calls this theory sharply into question.¹⁸³ Indeed, even if licenses are configured so as not to bar downstream redistribution completely and destroy secondary markets altogether, consumers may face “[t]he prospect of having to trace ‘chain of title’ before purchasing a book or record at a secondhand store.”¹⁸⁴

Libraries, which were a particular source of policy concern in *Kirtsaeng*,¹⁸⁵ face significant threats as publishers shift toward digital distribution of books under a licensing model.¹⁸⁶ Given the high degree of downstream control afforded to publishers by digital distribution, libraries could face significant losses in access to secondary markets for books, a traditional source for building their collections.¹⁸⁷ Furthermore, libraries face the prospect of not being able to preserve their digital collections, for publishers can license e-

package’s contents, is how consumers are protected in a market economy.”); Raymond T. Nimmer, *Copyright First Sale and the Over-Riding Role of Contract*, 51 SANTA CLARA L. REV. 1311 (2011) (arguing in favor of the license-versus-sale distinction); Jonathan C. Tobin, *Licensing As a Means of Providing Affordability and Accessibility in Digital Markets: Alternatives to a Digital First Sale Doctrine*, 93 J. PAT. & TRADEMARK OFF. SOC’Y 167, 184–87 (2011) (arguing that licensing practices are more efficient than would be adoption of a “digital first sale doctrine”).

183. See Perzanowski & Schultz, *supra* note 17, at 896 (hypothesizing complex individualized contractual restraints placed on physical copies of CDs and DVDs, noting that “[t]he costs of understanding these offers and obligations would be exorbitant not only for the initial purchaser but also any subsequent recipient, often exceeding the cost of the desired item”); Molly Shaffer Van Houweling, *The New Servitudes*, 96 GEO. L.J. 885, 932–39 (2007) (discussing notice and information costs flowing from servitudes attached to chattels); Katz, *supra* note 91, at 37–44 (arguing that the view of contracting around intellectual property limitations as presumptively socially efficient is flawed because transaction costs must be taken into account, so much so that “[c]ontracting around the first sale doctrine should be presumptively invalid”).

184. McIntyre, *supra* note 127, at 20. As early as 2005, the Maryland State Bar Association distributed physical copies of its member directory under a shrinkwrap license prohibiting copying except for individual use. George H. Pike, *Licenses Under Wrap*, 22 INFO. TODAY, no. 9, Oct. 2005, at 17, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1640109. On the other hand, proponents of the market efficiency of contracting around copyright limitations might argue that the market would simply reject distribution under licenses it finds unduly restrictive. See Nimmer, *supra* note 182, at 1319 (“The choice resides in the copyright owners’ marketing decision as to whether to convey or authorize conveyance of copy ownership, and in the market’s reaction to that decision.”). Whether the threat of draconian shrinkwrap licenses applied to physical goods will extend far beyond the efforts of enterprising lawyers to prevent copying of directories, or whether it is simply a paper tiger, remains to be seen.

185. See *Kirtsaeng*, 133 S. Ct. at 1364.

186. See Rachel Ann Geist, Note, *A “License to Read”: The Effect of E-books on Publishers, Libraries, and the First Sale Doctrine*, 52 IDEA 63, 92–95 (2012).

187. *Id.* at 93.

books to libraries on a time-limited basis, and when these licenses are enforced by DRM, “the publisher gets to choose when the book falls apart.”¹⁸⁸ Finally, licensing may allow publishers to override the fair use exemptions for libraries provided by § 108 of the Copyright Act.¹⁸⁹ Even though copying portions of works for patrons and interlibrary loan programs is explicitly protected by § 108, those exemptions do not supersede “any contractual obligations assumed at any time by the library . . . when it obtained a copy or phonorecord of a work in its collections.”¹⁹⁰ Thus, publishers licensing e-books to libraries under license agreements could apparently restrict such previously permissible copying if they so pleased.¹⁹¹

Both DRM and restrictive licensing also raise general concerns regarding copyright law’s central goal of promoting innovation. Most obviously, as with any curtailment of the first sale doctrine, these strategies arguably impede the dissemination of existing innovations.¹⁹² From a more nuanced perspective, DRM and distribution via license are particularly problematic because the restrictions they impose on distributed copies are not constructed with potential unforeseen beneficial uses in mind.¹⁹³ Accordingly, these strategies may act to hamper follow-on innovation, as well as preservation of access to existing innovations.¹⁹⁴

Most fundamentally, the *ReDigi* holding calls into question the aptitude of the current copyright law framework in the Internet age. Employing a

188. *Digital Goods Moving to Licensing Model, Especially After ‘Kirtsaeng,’ SILA Official Says*, *supra* note 157 (quoting Nancy Sims, University of Minnesota copyright program librarian); *see* Geist, *supra* note 186, at 92–93 (“A budget cut to a library in the digital age may render it unable to pay its licensing fees and, as a result, cause the loss of fifty percent or more of the library’s ‘collection’ overnight.”).

189. *See* 17 U.S.C. § 108 (2012).

190. *See* 17 U.S.C. § 108(f)(4).

191. *See* Geist, *supra* note 186, at 94–95.

192. *See* Perzanowski & Schultz, *supra* note 17, at 899.

193. *See* Van Houweling, *supra* note 183, at 939–46 (discussing the “problem of the future”—that “even running restrictions that are well understood and efficient when first imposed can, over time, cause underuse or inefficient use of the resources subject to the restriction”); Burk, *supra* note 129, at 545 (arguing that positive externalities such as preservation of works and unforeseen beneficial uses should be taken into account when using “regulatory design[s]” such as DRM to effect price discrimination); *id.* at 550–51 (noting that “there is no incentive for the promulgators of DRM to even attempt to foresee usage with highly diffuse but positive social externalities: [n]either the copyright holder nor the purchaser of a copyrighted work are the direct beneficiaries of such external effects, and so have no reason to take them into account”).

194. *See* Perzanowski & Schultz, *supra* note 17, at 907 (noting the negative effects of use restrictions on user innovation).

“narrow, technical, and purely legal” application of current copyright law,¹⁹⁵ the *ReDigi* court reached a result in which the reproduction right effectively nullifies the first sale doctrine for works distributed via download.¹⁹⁶ This raises concerns that fundamental aspects of U.S. copyright law may be inapposite as works are increasingly disseminated over the Internet, where “copying is the architecture of being.”¹⁹⁷

By eliminating suppliers’ most direct means of segmenting markets for geographic price discrimination, *Kirtsaeng* may well have the unintended effect of driving suppliers to employ price discrimination strategies that exacerbate the concerns central to its policy analysis.¹⁹⁸ As debates over the legal status of those strategies continue, whether in the courts or before Congress, suppliers will likely continue to advance the ability to price discriminate as a policy argument for legal approval of those strategies.¹⁹⁹ In short, the Supreme Court’s decision in *Kirtsaeng* has not provided a final word on either price discrimination or the status of the first sale doctrine. The clash between suppliers’ desire to engage in market segmentation on the one hand and the policy motivations underlying the first sale doctrine on the other demonstrates the basic tension at the heart of U.S. copyright law. The conflict between price discrimination and the first sale doctrine is fundamental, and it may not be significantly easier to resolve than the more general, foundational tension between incentives and access.

195. *Capitol Records, LLC v. ReDigi Inc.*, 934 F. Supp. 2d 640, 645 (S.D.N.Y. 2013) (“Because this is a court of law and not a congressional subcommittee or technology blog, the issues are narrow, technical, and purely legal.”).

196. See discussion *supra* Section IV.B.3.

197. Ned Snow, *Copytraps*, 84 IND. L.J. 285, 286 (2009). As just one example—apart from the difficulties surrounding the first sale doctrine—of copyright’s uneasy transition into the Internet age, commentators have expressed concern over the application of strict liability for infringement in the cyberspace context. See *generally id.*; Jacqueline D. Lipton, *Cyberspace, Exceptionalism, and Innocent Copyright Infringement*, 13 VAND. J. ENT. & TECH. L. 767 (2011).

198. See Meurer, *supra* note 90, at 104 (“The danger inherent in a policy that discourages price discrimination by making arbitrage easier is that it might displace benign price discrimination into other more pernicious forms.”).

199. See, e.g., Nimmer, *supra* note 182, at 1320 (advancing facilitation of price discrimination as a justification for the license-versus-sale distinction); Andi Sporkin, *AAP Statement on Supreme Court Decision*, ASSOC. OF. AM. PUBLISHERS (Mar. 19, 2013), <http://www.publishers.org/press/98/> (expressing disappointment with the *Kirtsaeng* decision, asserting that the decision “will discourage the active export of [U.S.] copyrighted works” and “reduce the ability of educators and students in foreign countries to have access to [U.S.]-produced educational materials,” and stating that “AAP will be prepared to participate on behalf of publishers in whatever process Congress undertakes to consider and address these issues”); Grimmelmann, *supra* note 12 (“However one comes out on first sale and imported textbooks, the issue, in books and beyond, is too significant to end [with the *Kirtsaeng* decision]. . . . Ladies and gentlemen, start your lobbyists.”).

NEW RULES FOR A NEW DECADE: IMPROVING THE COPYRIGHT OFFICE'S ANTI-CIRCUMVENTION RULEMAKINGS

Mark Gray[†]

In 2013, over 100,000 Americans petitioned their government to make an important policy change. Their request was not to legalize marijuana,¹ to strengthen gun control laws,² or even to build a new Death Star.³ Instead, the petition requested reversal of an administrative decision by the U.S. Copyright Office made under an obscure provision of the Digital Millennium Copyright Act (“DMCA”).⁴ Though issues of copyright rarely garner the level of public attention that larger populist issues do, a significant number of Americans expressed concern that federal copyright law, intended to protect the creative works of artists, was being used to prevent American consumers from using legally-purchased cell phones on mobile networks of their choosing.⁵

Since the passage of the DMCA in 1998, every three years the Copyright Office has conducted a rulemaking to determine what classes of copyrighted works, if any, should be exempted from the DMCA’s prohibition on circumvention of technological protection measures.⁶ Five times the

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1. See Gil Kerlikowse, *What We Have to Say About Legalizing Marijuana*, WE THE PEOPLE, <https://petitions.whitehouse.gov/response/what-we-have-say-about-legalizing-marijuana> (last visited Mar. 28, 2014) (responding to eight petitions, including one with 74,169 signatures).

2. See Bruce Reed, *A Message from President Obama about Your Petition on Reducing Gun Violence*, WE THE PEOPLE, <http://petitions.whitehouse.gov/response/message-president-obama-about-your-petition-reducing-gun-violence> (last visited Mar. 29, 2014) (responding to thirty-three separate petitions about changing gun control laws).

3. See *Secure resources and funding, and begin construction of a Death Star by 2016*, WE THE PEOPLE (Nov. 14, 2012), <https://petitions.whitehouse.gov/petition/secure-resources-and-funding-and-begin-construction-death-star-2016/wlfKzFkN>.

4. *Make Unlocking Cell Phones Legal*, WE THE PEOPLE, <https://petitions.whitehouse.gov/petition/make-unlocking-cell-phones-legal/1g9KhZG7> (Jan. 24, 2012) (requesting reversal of the Librarian of Congress’s decision to remove cell phone unlocking from the list of DMCA anti-circumvention exemptions).

5. See *id.*

6. See 17 U.S.C. § 1201(a)(1)(B)–(C) (2012) (directing the Librarian of Congress to grant exemptions following a triennial rulemaking conducted by the Register of Copyrights).

Copyright Office has gathered input from copyright owners and other parties to determine what exemptions to recommend,⁷ but no exemption stirred a public outcry until 2012. In the most recent rulemaking, the Librarian of Congress declined to renew an exemption that permitted consumers to unlock their cell phones for use on other wireless networks.⁸ Despite the rulemaking process being intended to act as a “fail-safe” protecting the right of consumers to make legal use of copyrighted works,⁹ the rulemaking landed on an outcome that sparked concerns from both the public and the White House that a legitimate activity was being outlawed.¹⁰ Such a response raises the question as to whether the rulemaking process is fulfilling its intended role, and what, if any, lessons can be learned from over a decade of experience with this process.

This Note discusses trends in the Copyright Office’s anti-circumvention rulings and suggests changes that incorporate lessons gained from over a decade of experience with the process. Part I describes the legislative origins of the rulemaking process in the DMCA and its later implementation, with a focus on larger trends and themes of the anti-circumvention rulemakings through 2009. Part II reviews the recent 2012 rulemaking, selecting a few examples to illustrate some issues with the rulemaking process with a particular emphasis on the controversial denial of the cell phone unlocking exemption. Part III identifies three main areas of concern and suggests changes to the rulemaking process that would address those concerns while more clearly aligning the rulemaking with Congress’s intended goals. Part IV concludes.

I. BACKGROUND

When the Copyright Office has conducted rulemakings under the DMCA, it has frequently cited the intent of Congress to justify its decisions and define the scope of its authority. Understanding those arguments requires a clear idea of how the DMCA was drafted and its provisions

7. The specifics of this process are discussed *infra* Section I.A.

8. Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies, 77 Fed. Reg. 65,260, 65,278 (Oct. 26, 2012) (to be codified at 37 C.F.R. pt. 201).

9. The House Commerce Committee, which added the rulemaking process to the DMCA, described the process as a “fail-safe” mechanism to protect against threats to lawful use of copyrighted works. H.R. REP. NO. 105-551, pt. 2, at 36 (1998) [hereinafter Commerce Comm. Report].

10. R. David Edelman, *It's Time to Legalize Cell Phone Unlocking*, WE THE PEOPLE, <https://petitions.whitehouse.gov/response/its-time-legalize-cell-phone-unlocking> (last visited Mar. 28, 2012).

finalized. As with many major laws, the DMCA was the result of numerous compromises and intense lobbying pressure, and the final text left a legacy of confusion and ambiguity for the Copyright Office to parse through.

A. THE BIRTH OF THE DMCA

In the early 1990s, the Clinton administration formed a task force to analyze the early Internet, with a focus on whether commercial interests would be willing to provide content on the Internet to consumers.¹¹ The head of the Patent and Trademark Office, Bruce Lehman, was tapped to lead a working group on the issue, and the group produced a white paper recommending, among other things, that Congress prohibit the manufacture of tools that would help individuals circumvent technological protections of copyrighted works.¹² Although the White Paper characterized its recommendations as small changes consistent with existing law,¹³ there was strong public debate and pushback against the ideas it presented.¹⁴ As Congress considered the White Paper's proposed legislative changes, the United States attended a 1996 conference for the World Intellectual Property Organization ("WIPO"), where attendees approved a treaty committing to provide legal protection against "circumvention of effective technological measures that are used by authors in connection with the exercise of their rights under this Treaty or the Berne Convention."¹⁵ To bring the country

11. JESSICA LITMAN, *DIGITAL COPYRIGHT 90* (2006). For a thorough discussion of the events leading up to the DMCA, see *id.* at 89–96. Professor Litman has described early conceptualizations of the Internet as a form of more interactive cable television programming. *Id.* at 89–90.

12. INFO. INFRASTRUCTURE TASK FORCE, *INTELLECTUAL PROPERTY AND THE NATIONAL INFORMATION INFRASTRUCTURE: THE REPORT OF THE WORKING GROUP ON INTELLECTUAL PROPERTY RIGHTS 230–34* (1995) [hereinafter *Lehman White Paper*].

13. See *id.* at 233–34 (suggesting its recommendations were "not unprecedented"). But see LITMAN, *supra* note 11, at 96 (characterizing the Lehman White Paper's description of copyright law as "dubious" and noting strong criticism by copyright scholars).

14. See, e.g., Denise Caruso, *The prospect of Internet censorship raises troubling issues for business*, N.Y. TIMES (Dec. 18, 1995), <http://www.nytimes.com/1995/12/18/business/technology-digital-commerce-prospect-internet-censorship-raises-troubling-issues.html> (expressing concerns the law "could create restrictions on free speech that are as sweeping as they are vague"); Pamela Samuelson, *The Copyright Grab*, WIRED, Jan. 2006, available at <http://www.wired.com/wired/archive/4.01/white.paper.html> (describing the law as an attempt by publishers to control all private uses of copyrighted works).

15. WIPO Copyright Treaty art. 11, Dec. 20, 1996, 2186 U.N.T.S. 121 available at http://www.wipo.int/export/sites/www/treaties/en/ip/wct/pdf/trtdocs_wo033.pdf (last visited Sept. 28, 2013). Bruce Lehman, attending the conference, advocated for the language despite being warned by Senator Orrin Hatch not to push for changes when Congress was debating the ideas from the White Paper. JONATHAN BAND & MASANOBU KATOH, *INTERFACES ON TRIAL 2.0* 78 (2010).

into compliance with its treaty obligations, Senator Orrin Hatch introduced a bill the following summer.¹⁶

That bill, which would later become known as the Digital Millennium Copyright Act (“DMCA”), arguably went further than the WIPO treaty required, prohibiting circumvention of technological protections to gain access to a work, as well as prohibiting the manufacture or distribution of tools that would enable such circumvention.¹⁷ Although the Senate quickly passed the original draft bill with little debate,¹⁸ a collection of academics, consumer advocates, and members of the technology industries called the Digital Future Coalition (“DFC”) lobbied the House of Representatives to make changes to the circumvention language, concerned that the bill as drafted would inhibit fair use and cover drastically more situations than intended by its authors.¹⁹ Concerned that the House Judiciary Committee would be dismissive of their concerns, the DFC successfully convinced the leadership of the House Commerce Committee to take authority over marking up the bill.²⁰ Presumably the House Commerce Committee, which interacted with technology manufacturers and was less closely tied to the entertainment industry, would be more receptive to their concerns than the Judiciary Committee.

The Commerce Committee was concerned about whether fair use would still apply to circumvention and allow consumers to circumvent for otherwise lawful uses of copyrighted works.²¹ Although representatives of copyright industries insisted that fair use would not be undermined by the circumvention ban, they also were opposed to adding an explicit fair use privilege into the legislation, claiming such a privilege would provide a “roadmap” for circumvention services.²² Eventually, a compromise was reached where the phrase “fair use” would not appear in the section of the DMCA prohibition and the Department of Commerce would be tasked with promulgating regulations allowing exemptions for individuals.²³ Though circumvention would be generally prohibited, the Department of Commerce

16. 143 CONG. REC. 17,262 (1997).

17. See LITMAN, *supra* note 11, at 133–34.

18. See *id.* at 136–37.

19. See *id.* at 122–45 (discussing the background of the DFC and its role in the DMCA’s legislative path).

20. *Id.* at 137.

21. *Id.* at 138.

22. See *Copyright Treaties Implementation Act: Hearing on H.R. 2281 Before the Subcomm. on Telecomm., Trade and Consumer Protection of the H. Comm. on Commerce*, 105th Cong. 57 (1998) (testimony of Steven J. Metalitz, Motion Picture Association of America).

23. See LITMAN, *supra* note 11, at 140–41 (“The compromise on fair use nowhere mentioned the phrase ‘fair use.’”).

would conduct studies every two years identifying the negative impact of the ban on consumers, and the Department could identify classes of copyrighted works for which circumvention by individuals would be permitted.²⁴ Later, when the House and Senate reconciled their different versions of the bill, the process was changed to a rulemaking run every three years by the Copyright Office.²⁵ The Copyright Office would take input from the Department of Commerce and members of the public before the Register of Copyrights recommended exemptions to the Librarian of Congress, who would make the final decision about which classes of copyrighted works were exempt from the ban on individual circumvention.²⁶ With only a few weeks remaining in the congressional session, the legislators were focused on ensuring that *something* passed, making a number of last-minute deals and changes to ensure that happened.²⁷

Though much effort and time had been spent debating the impact of the circumvention ban on consumers, the statutory language in the DMCA § 1201 discussing the rulemaking process was relatively brief:

(C) During the 2-year period described in subparagraph (A), and during each succeeding 3-year period, the Librarian of Congress, upon the recommendation of the Register of Copyrights, who shall consult with the Assistant Secretary for Communications and Information of the Department of Commerce and report and comment on his or her views in making such recommendation, shall make the determination in a rulemaking proceeding for purposes of subparagraph (B) of whether persons who are users of a copyrighted work are, or are likely to be in the succeeding 3-year period, adversely affected by the prohibition under subparagraph (A) in their ability to make noninfringing uses under this title of a particular class of copyrighted works. In conducting such rulemaking, the Librarian shall examine—

- (i) the availability for use of copyrighted works;
- (ii) the availability for use of works for nonprofit archival, preservation, and educational purposes;
- (iii) the impact that the prohibition on the circumvention of technological measures applied to copyrighted works has on criticism, comment, news reporting, teaching, scholarship, or research;

24. *See id.* at 141.

25. *See id.* at 143–44.

26. *See id.* at 144.

27. *See id.* at 142–43.

- (iv) the effect of circumvention of technological measures on the market for or value of copyrighted works; and
- (v) such other factors as the Librarian considers appropriate.²⁸

The statute directs the Librarian of Congress to examine the impact of the ban on “noninfringing use,” but no specific mention is made of fair use in the text.²⁹ It provides no details as to how to conduct the rulemaking, the weight to be given to the Department of Commerce’s input, or how to define a “particular class of copyrighted works” for exemption.

After fighting for over a year to limit the potential harm to consumers posed by the bill, activists like the Digital Future Coalition (“DFC”) had only been able to extract “modest concessions” rather than the sweeping changes they hoped.³⁰ The rulemaking only offered the opportunity (but not certainty) to mitigate excessive harm from the circumvention ban. One founder of the DFC privately doubted whether the large, multiyear effort had ultimately been worth the few concessions they had won.³¹

B. TRENDS IN EARLY RULEMAKINGS: FROM HARSH TO FLEXIBLE

With so little statutory direction for the rulemaking, a number of questions remained to be resolved by the Copyright Office. In early rulemakings, the Copyright Office took a conservative approach to conducting its role, but its approach grew more flexible over time. The Office had the hard task of wrestling with a complicated law full of inconsistencies.³² Particularly difficult questions were the necessary showing of harm to justify an exemption and the definition of a class of works.

1. *Standard of Harm*

One of the first difficulties the Copyright Office encountered was defining the requisite evidence of harm necessary to justify granting an

28. 17 U.S.C. § 1201(a)(1)(C) (2012).

29. *Id.*

30. See LITMAN, *supra* note 11, at 145 (arguing that the deal amounted to “sell[ing] the public short”).

31. Mark Gray, A “Causal Nexus of Harm”: DMCA Circumvention and Rulemaking 26–27 (Apr. 5, 2011) (unpublished A.B. thesis, Princeton University) (on file with Mudd Library, Princeton University).

32. For a criticism of the DMCA’s coherence, reality, and breadth, see David Nimmer, *Codifying Copyright Comprehensibly*, 51 UCLA L. REV. 1233, 1342–44, 1370–81 (2003). Professor Nimmer has criticized the DMCA rulemaking provision as leaving copyright law “in shambles” and expressed concern that § 1201’s circumvention ban, as written, allows copyright law to become “an all-encompassing monstrosity” by expanding into areas previously untouched by copyright. *Id.* at 1342, 1374.

exemption. In the first rulemaking, the Register denied recommendation of most proposed exemptions because she interpreted the statute to require a showing of “substantial adverse impact” on noninfringing use of copyrighted works.³³ The statute does not use the phrase “substantial” harm, but the Register supported her reading by citing the House Commerce Committee’s report, which stated both that the circumvention ban was presumed to apply unless the harm criteria were met and that the rulemaking should focus on “distinct, verifiable, and measurable impacts” rather than *de minimis* harm.³⁴ Reading the statute to require a showing of “substantial” harm was a controversial decision, and the Department of Commerce, in its advisory capacity, pushed back on such an interpretation as lacking any statutory basis for adding a “significant new term” to the statute.³⁵

The Register later clarified in 2003 that she had not intended to set a higher burden of proof, but given what she called the “undue alarm” expressed by members of the public and the Department of Commerce, she clarified the term to require evidence of “distinct, verifiable” harm to meet the burden of proof.³⁶ There have still been instances where parties have criticized the Register as requiring an unnecessarily high burden of proof,³⁷

33. Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies, 65 Fed. Reg. 64,556, 64,558 (Oct. 27, 2000) (codified at 37 C.F.R. pt. 201) [hereinafter 2000 Exemption].

34. *Id.* at 64,558 (citing Commerce Comm. Report, *supra* note 9, at 37).

35. Letter from Nancy Victory, National Telecommunications and Information Administration, to Marybeth Peters, Register of Copyrights (Aug. 11, 2003), *available at* <http://www.ntia.doc.gov/other-publication/2003/ntia-letter-register-copyrights-regarding-dmca>.

36. MARYBETH PETERS, REGISTER OF COPYRIGHTS, RECOMMENDATION OF THE REGISTER OF COPYRIGHTS IN RM 2002-3; RULEMAKING ON EXEMPTIONS FROM PROHIBITION OF CIRCUMVENTION OF COPYRIGHT PROTECTION SYSTEMS FOR ACCESS CONTROL 16–18 (2003), *available at* <http://www.copyright.gov/1201/docs/registers-recommendation.pdf> [hereinafter 2003 Recommendation] (citing Webster’s Dictionary). The Register clarified that her use of substantial was meant as the opposite of “insubstantial,” using the word because it appeared in a report from the House Manager. *Id.* at 16. However, commenters have questioned the value of the House Manager’s report because it was written after passage of the DMCA draft by the House and was heavily influenced by the Judiciary Committee, which wanted stricter standards than the Commerce Committee (likely out of irritation with their role over copyright being usurped). *See* Bill Herman & Oscar Gandy, Jr., *Catch 1201: A Legislative History and Content Analysis of the DMCA Exemption Proceedings*, 24 CARDOZO ARTS & ENT. L.J. 121, 169–70 (2006) (characterizing use of the House Manager’s Report as foreshadowing her “eagerness” to construct a high standard of proof).

37. *See, e.g., id.* at 172–74 (citing a proposal in 2003 rejected for lack of “substantial” harm despite making a legitimate argument about expense to consumers); FRED VON LOHMANN & GWEN HINZE, ELECTRONIC FRONTIER FOUNDATION, DMCA TRIENNIAL RULEMAKING: FAILING THE DIGITAL CONSUMER 4–6 (2005), *available at* https://www.eff.org/files/filenode/DMCA_rulemaking_broken.pdf (citing examples of the

but there is evidence that, at least for some exemptions, she has required a lower burden of harm to consumers when the harm to copyright owners is little.³⁸

2. *Defining a “Class of Works”*

Although the Copyright Act defines “categories” of copyrighted works, such as audio-visual works and literary works, Congress failed to define what a “class of works” encompassed when writing the DMCA and directing the Librarian to grant exemptions based on them. In the first rulemaking, the Register described the scope of a “class of works” as a “key issue” on which she sought public input.³⁹ A number of submissions called for the definition of “class” to be “function-based”—to incorporate the intended use of the work when deciding if an exemption was proper.⁴⁰ However, the Register did not believe the Librarian could incorporate “external criteria” such as the intended use of a work into the definition of a class, citing the Commerce Committee, which intended the term to encompass a narrow subset of the broader categories of copyrighted works.⁴¹ Under this interpretation, the Register denied recommending many submitted exemptions in 2000 because they were based on the intended use of the work.⁴² Similarly, in 2003, the Register declined to recommend a number of exemptions such as circumvention for “fair use works,”⁴³ circumvention necessary for conducting a “legitimate research project,”⁴⁴ and circumvention for reverse engineering for interoperability.⁴⁵

In 2006, the Register reevaluated her stance on use-based classes in light of a proposed exemption for film studies professors wishing to make

Register dismissing costs and impediments to consumers as “mere inconveniences” rather than sufficient harm to justify an exemption).

38. In 2009, the Register permitted an exemption allowing consumers to “jailbreak” their smartphones to run third-party software on them, despite having rejected a previous exemption allowing “jailbreaking” of video game consoles for the same purpose. Elizabeth Jackson, *The Copyright Office's Protection of Fair Uses Under the DMCA: Why the Rulemaking Proceedings Might Be Unsustainable and Solutions for Their Survival*, 58 J. COPYRIGHT SOC'Y U.S.A. 521, 540 (2011).

39. 2000 Exemption, *supra* note 33, at 64,559.

40. *Id.*

41. *Id.* at 64,559–60 (citing Commerce Comm. Report, *supra* note 9, at 38).

42. *Id.* at 64,562.

43. 2003 Recommendation, *supra* note 36, at 84.

44. *Id.* at 86–88.

45. *Id.* at 182–83. The Register based her rejection of this exemption on the belief that the DMCA allowed the reverse engineering desired by the proponents and that the Librarian was not authorized to further reshape an area where Congress had carefully constructed a solution. *Id.*

educational use of DVDs in the classroom. Three media studies professors from the University of Pennsylvania proposed an exemption for “[a]udiovisual works included in the educational library of a college or university’s film or media studies department and that are protected by technological measures that prevent their educational use.”⁴⁶ Media studies professors often use clips of multiple movies in class, which requires either manually swapping DVDs or breaking DVD encryption to create clips for convenient classroom use.⁴⁷ The professors’ submission cited examples of professors who were forced to either lose ten percent of class time for “meaningless DVD juggling” or knowingly violate Section 1201’s ban.⁴⁸ The motion picture industry vigorously objected to the proposed exemption, spending considerable time at a public hearing arguing that a propped-up camcorder pointed at a television screen was good enough for the professors and an exemption was unnecessary because the professors were not entitled to the “optimum” method of making their use.⁴⁹ Ultimately, the Register determined that the exemption should be granted, which meant changing how the Office defined a “class of works.”⁵⁰

The Register, confronted with clear evidence of a legitimate noninfringing use that would otherwise be prevented by the DMCA, was

46. Comments of Peter Decherney, Assistant Professor at the University of Pennsylvania’s Cinema Studies Program, Michael Delli Carpini, Professor & Annenberg Dean, & Katherine Sender, Assistant Professor at the University of Pennsylvania’s Annenberg School of Communication, *In re* Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies at 1, No. RM 2005-11 (U.S. Copyright Office 2005), *available at* http://www.copyright.gov/1201/2006/comments/decherney_upenn.pdf [hereinafter Decherney Proposal]. Presumably, the exemption added the location of the works as a way to avoid incorporating the use, as required by the Register in previous rulemakings, while achieving a similar limiting function to maximize the chance of success. In the eyes of the professors, nobody had previously made the argument for such an exemption properly, and they could uniquely make a case because of the need for high-quality digital media in a media studies class. *See* Gray, *supra* note 31, at 76.

47. Decherney Proposal, *supra* note 46, at 1–2.

48. *Id.* at 5, 8–9.

49. *See* Transcript of Public Hearing on Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies at 56–59, No. RM 2005-11A (U.S. Copyright Office Apr. 3, 2006), *available at* <http://www.copyright.gov/1201/2006/hearings/transcript-april03.pdf>.

50. MARYBETH PETERS, REGISTER OF COPYRIGHTS, RECOMMENDATION OF THE REGISTER OF COPYRIGHTS IN RM 2005-11, RULEMAKING ON EXEMPTIONS FROM PROHIBITION ON CIRCUMVENTION OF COPYRIGHT PROTECTION SYSTEMS FOR ACCESS CONTROL TECHNOLOGIES 15 (Nov. 17, 2006), *available at* http://www.copyright.gov/1201/docs/1201_recommendation.pdf [hereinafter 2006 Recommendation] (“Critical to the recommendation in support of an exemption, however, is a clarification of the interpretation of the proper scope of what may be a ‘class of works.’”).

willing to incorporate an intended use into the “class of works” exempted from § 1201’s circumvention ban.⁵¹ Turning to the statute, the Register noted that it directed that exemptions would prevent the circumvention ban from applying to “such users,” who were harmed in making noninfringing use, implying that the exemption could incorporate use.⁵² This new interpretation would also permit exemptions to be narrower in scope, addressing the Register’s frequent concern that exemptions would be unnecessarily broad and exceed the authority granted to the Copyright Office.⁵³ Ultimately, the Register recommended an exemption for “[a]udiovisual works included in the educational library of a college or university’s film or media studies department, when circumvention is accomplished for the purpose of making compilations of portions of those works for educational use in the classroom by media studies or film professors,” which incorporated both a locational restriction (the works must be owned by a film studies department) and a use-based restriction (for purposes of educational use by a specific category of professors).⁵⁴

Since 2006, the Copyright Office has relied heavily on use-based limitations to narrow exemptions. Of the six exemptions recommended in 2006, four incorporated an intended use.⁵⁵ In the 2009 rulemaking, the Register went further in relying on use to modify exemptions, particularly in her modification of a proposed DVD exemption.⁵⁶ Whereas the 2006

51. *Id.* at 16–17. The Register considered her earlier conclusion “reasonable in light of the record,” but the factual record presented by the professors was sufficient to change her mind. *Id.*

52. *Id.* at 18.

53. *See id.* at 19 (noting that in some cases “failing to specify the use or users for whom the exemption was found to be warranted would result in an unnecessarily broad exemption”). The hesitance of the Copyright Office to go beyond the scope of its authority has been a common feature of the various rulemakings. Although the Copyright Office is rightly concerned about respecting the limits of its statutory authority, it may also be concerned that overly aggressive action could result in a push by aggrieved parties to consolidate its functions into another executive agency. *Cf.* LITMAN, *supra* note 11, at 74 (mentioning the Copyright Office’s reliance on the copyright bar to protect it from legislative influence); *see also* Pamela Samuelson, *Will the Copyright Office Be Obsolete in the Twenty-First Century*, 13 CARDOZO ARTS & ENT. L.J. 55, 61–64 (1994) (discussing the possibility of the Patent and Trademark Office taking over the functions of the Copyright Office).

54. 2006 Recommendation, *supra* note 50, at 24.

55. *See id.* at 1–2 (recommending exemptions “for the purpose of” education, archival reproduction, lawfully connecting to cell phone networks, and good faith security testing).

56. *See* MARYBETH PETERS, REGISTER OF COPYRIGHTS, RECOMMENDATION OF THE REGISTER OF COPYRIGHTS IN RM 2008-8; RULEMAKING ON EXEMPTIONS FROM PROHIBITION ON CIRCUMVENTION OF COPYRIGHT PROTECTION SYSTEMS FOR ACCESS

exemption was narrowed by both location and use,⁵⁷ the Register recommended a far broader exemption for audiovisual works encompassing three main uses: educational use by college professors and students, documentary filmmaking, and noncommercial videos.⁵⁸ This was a significantly more expansive exemption than that in the previous round, changing the strict limits of the older exemption and permitting three broad use types.⁵⁹ One commenter has suggested this was a natural reaction to the Copyright Office's greater focus on users.⁶⁰ Perhaps more surprisingly, users who wanted to make use of the exemption could do so as long as they "believe[d] and ha[d] reasonable grounds for believing that circumvention is necessary,"⁶¹ a major change from the narrower exemptions from earlier rulemakings. After the 2009 rulemaking, there was room for optimism within the copyright community that the rulemakings would be an effective process to address fair use concerns for consumers beyond the seemingly harsh statutory language embedded in the DMCA.

II. RECENT RULEMAKING UPDATE

In December 2010, the Register of Copyrights, Marybeth Peters, stepped down and was replaced by Maria Pallante.⁶² Register Peters served as Register for over fifteen years, stepping down shortly after the final 2010 rulemaking.⁶³ When Register Pallante stepped into her post, it remained to be seen how she would differ or align with the decisions of her predecessor when handling the numerous issues touched upon during the rulemaking process.

CONTROL TECHNOLOGIES 72 (June 11, 2010), *available at* <http://www.copyright.gov/1201/2010/initialed-registers-recommendation-june-11-2010.pdf> [hereinafter 2010 Recommendation].

57. As mentioned *supra*, the requirement that a work be both used specifically by a film studies professor *and* reside in a university's media studies library would imply that if a professor in another field (such as music) wished to circumvent a DVD, or if the DVD to be utilized was a personal copy or stored at the university's main library, that would still be illegal under DMCA § 1201(a). *See* 2006 Recommendation, *supra* note 50, at 24.

58. 2010 Recommendation, *supra* note 56, at 21–22.

59. For example, permitting circumvention for "noncommercial video" is very broad, considering that in 2006 only a professor in a specific department would be permitted to circumvent. *See supra* note 57.

60. *See* Jackson, *supra* note 38, at 539.

61. *See* 2010 Recommendation, *supra* note 56, at 21.

62. *See* Marybeth Peters, 1994–2010, U.S. COPYRIGHT OFFICE (Jan. 27, 2014), <http://www.copyright.gov/history/bios/peters/peters.html>.

63. *Id.*

A. A NEW RULEMAKING RAISES NEW PROBLEMS

In the most recent rulemaking, the new Register took a somewhat different approach. Register Pallante was more cautious than her predecessor, differing in her handling of the definition of a “class of works,” as well as the standard of harm necessary to justify an exemption. The Register’s more conservative approach to recommending exemptions differed from the increasingly liberal decisions of previous rulemakings, which may have been a factor in the later public uproar over denial of an exemption for cell phone unlocking.

Though the Copyright Office had taken major steps in defining a “class of works,” in absence of guidance from Congress, the Register chose not to build further on that interpretation, instead denying a proposed exemption out of discomfort with defining a class. As in previous rulemakings, the Register incorporated intended use into the classes of works recommended for exemption, incorporating use into every recommended exemption.⁶⁴ However, when faced with a request to expand a previously granted exemption for jailbreaking to tablet devices, the Register refused to do so, stating that the term “tablet” was too “ill defined” and could potentially cover anything from iPads to laptops.⁶⁵ Despite acknowledging the similarity between tablets and mobile phones, which were again granted an exemption for jailbreaking in 2012, the Register denied creating any exemption for tablet devices, declining to further modify the proposal to make it sufficiently narrow to comply with Congress’s intent.⁶⁶ However, when discussing a

64. See MARIA PALLANTE, REGISTER OF COPYRIGHTS, SECTION 1201 RULEMAKING: FIFTH TRIENNIAL PROCEEDING TO DETERMINE EXEMPTIONS TO THE PROHIBITION ON CIRCUMVENTION, RECOMMENDATION OF THE REGISTER OF COPYRIGHTS 2–3 (Oct. 12, 2012), available at http://www.copyright.gov/1201/2012/Section_1201_Rulemaking%202012_Recommendation.pdf [hereinafter 2012 Recommendation] (recommending exemptions to permit the blind to use screen readers, to enable smartphones to run third-party software, and to conduct research for designing systems that allow blind or deaf consumers to enjoy audiovisual works).

65. *Id.* at 78. “Jailbreaking” allows third party applications to run on a restricted device, for example, installing applications on an iPhone that are not downloaded from Apple’s App Store. See Mike Keller, *Geek 101: What Is Jailbreaking?* PC WORLD (Feb. 13, 2012), http://www.techhive.com/article/249091/geek_101_what_is_jailbreaking.html.

66. 2012 Recommendation, *supra* note 64, at 78. When faced with a similar issue in past rulemakings, Register Peters simply added modifications she thought necessary to comply with the Copyright Office’s authority, such as when she added a use-based restriction on top of a location restriction to 2006’s film studies exemption. See 2006 Recommendation, *supra* note 50, at 19–24. Register Peters was motivated in part to ensure the exemption clearly identified the intended beneficiary, and her discussion of the locational restriction implies that keeping it made the rulemaking analysis more favorable because of the additional narrowing. *Id.* at 19–20.

proposed exemption for the blind to utilize screen readers, Register Pallante was willing to narrow the class of works by adding a stipulation that publishers be compensated when appropriate for regular commercial copies of the book,⁶⁷ an initiative not taken for the tablet question. This may have been because of the additional layers of complication in defining tablets or perhaps it was simply more politically difficult to deny an exemption to the blind than tablet owners.

Additionally, Register Pallante required a different showing of harm to merit an exemption than previous rulemakings. In 2010, Register Peters renewed an exemption allowing users to unlock their cell phones for legal use on other mobile networks, satisfied that consumers were substantially harmed because they required circumvention to switch mobile providers while keeping their own phones.⁶⁸ Register Pallante, looking at the facts again in 2012, instead said that consumers were not adversely impacted because more phones were being sold already unlocked; in other words, while consumers may not be able to change networks with their chosen phone, the existence of “ample alternatives” meant that consumers were insufficiently harmed to justify an exemption.⁶⁹ Register Peters’s discussion in 2010 implied that consumers having to change their purchasing habits (such as by purchasing a new phone) was a sufficient adverse impact to justify an exemption,⁷⁰ yet in 2012 Register Pallante did not go so far.⁷¹ Instead,

67. 2012 Recommendation, *supra* note 64, at 23–24.

68. *See* 2010 Recommendation, *supra* note 56, at 116 (“The material submitted in this rulemaking shows that the locks have a substantial adverse affect on the use of the handset. Specifically, if a consumer wishes to switch wireless providers, but keep her phone, she would have to engage in a circumventing activity.”). Though the Register granted an exemption for unlocking in 2006, there was very little record and analysis because the wireless industry ignored the proceedings until after the submission deadline, resulting in the Register discarding their submitted arguments and recommending the exemption based on a rich, unopposed record for the proponents. *See* 2006 Recommendation, *supra* note 50, at 42–48 (discussing the late of submissions from the wireless industry). The Register’s harsh tone may indicate a strong displeasure with the industry’s failure to engage in the rulemaking. *See id.* at 47 (“Not only would acceptance of the late filings wreak havoc on the decisionmaking process, but it also would be fundamentally unfair to the parties who have made timely submissions, and in particular to the proponents of the exemption.”). Furthermore, the analysis of the unlocking exemption in 2010 was far richer, comprising seventy of the 262 pages in the Register’s report. *See* 2010 Recommendation, *supra* note 56, at 105–74.

69. 2012 Recommendation, *supra* note 64, at 95.

70. *See* 2010 Recommendation, *supra* note 56, at 116.

71. As mentioned before, dismissing consumer cost as “mere inconvenience” has been a criticism of the Copyright Office in the past. *See* VON LOHMANN & HINZE, *supra* note 37, at 4–7. Similarly, it echoes arguments by the motion picture industry that recording DVD content off a television screen was “good enough” for educators to obviate the need for an

Register Pallante only recommended the unlocking exemption apply to phones purchased within ninety days of the Librarian's decision going into effect so that owners of older phones, which were not available unlocked, could unlock those devices for use on other networks.⁷² The Librarian of Congress adopted the Register's recommendations without comment.⁷³

B. PUBLIC BACKLASH OVER CELL PHONE UNLOCKING

The decision to outlaw cell phone unlocking hit news outlets and generated a fair amount of public concern.⁷⁴ On the White House's page for citizen petitions, over 114,000 people signed a petition to overturn the Librarian of Congress's decision.⁷⁵ The White House Senior Advisor for Internet, Innovation, & Privacy replied on behalf of the Obama administration, saying that not only should consumers be allowed to unlock their cell phones without legal penalty, but consumers should also be able to unlock tablet devices.⁷⁶ The White House stated it planned to formally engage the Federal Communications Commission ("FCC") through the National Telecommunications and Information Administration ("NTIA") in the Department of Commerce.⁷⁷

Interestingly, the Copyright Office and Library of Congress issued a joint statement reacting to the Obama administration, reiterating the goals of the rulemaking process and the legal constraints placed on it by Congress: "As designed by Congress, the rulemaking serves a very important function, but it was not intended to be a substitute for deliberations of broader public policy."⁷⁸ The statement was panned by technology site Techdirt, which described the statement as "a bit disingenuous,"⁷⁹ given that the rulemaking

exemption. *See* 2006 Recommendation, *supra* note 50, at 14–15 (listing arguments by opponents of the media studies DVD exemption).

72. 2012 Recommendation, *supra* note 64, at 99–100.

73. *See* Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies, 77 Fed. Reg. 65,260, 65,278 (Oct. 26, 2012) (to be codified at 37 C.F.R. pt. 201).

74. *See, e.g.*, Timothy B. Lee, *Jailbreaking now legal under DMCA for smartphones, but not tablets*, ARS TECHNICA (Oct. 25, 2012), <http://arstechnica.com/tech-policy/2012/10/jail-breaking-now-legal-under-dmca-for-smartphones-but-not-tablets/> (calling the ruling "arbitrary" and showing the "fundamental brokenness" of the DMCA).

75. *Make Unlocking Cell Phones Legal*, *supra* note 4.

76. Edelman, *supra* note 10.

77. *Id.*

78. *Statement from the Library of Congress Regarding White House Statement Today in Response to a Petition on Section 1201 Rulemaking*, LIBRARY OF CONGRESS (Mar. 4, 2013), <http://www.loc.gov/today/pr/2013/13-041.html>.

79. Mike Masnick, *Library of Congress Shoots Back at White House Over Phone Unlocking: We're Just Doing Our Job*, TECHDIRT (Mar. 5, 2013), <http://www.techdirt.com/>

was meant as a safety valve to problems with the DMCA and that the Librarian can consider “such other factors as the Librarian considers appropriate.”⁸⁰

Since then, a number of parties have tried to enable consumers to unlock their cell phones in a more permanent way. Multiple legislators have introduced bills in Congress to fix the issue, some completely revising the text of DMCA § 1201⁸¹ and others simply overriding the Librarian’s decision with regard to the cell phone unlocking exemption and directing a new rulemaking focused specifically on expanding an unlocking exemption to tablet devices.⁸²

On September 17, 2013, the NTIA formally petitioned the FCC to conduct a rulemaking that would add a new obligation of U.S. mobile carriers to unlock any device furnished by the carrier so that it could be used with other lawfully obtained mobile services.⁸³ Providing a summary of the DMCA rulemakings and the public response to the recent exemption, as well as offering a proposed rule for adoption, the NTIA made a strong case that such a rule would be in the public interest and would be well within the FCC’s statutory authority.⁸⁴ In December, CTIA-The Wireless Association,⁸⁵ a trade association for wireless providers, announced a voluntary set of principles for cell phone unlocking it had committed to adopt after pressure from the FCC.⁸⁶ The issue of cell phone unlocking, now removed from the

blog/wireless/articles/20130304/16271422195/librarian-congress-shoots-back-white-house-over-phone-unlocking-were-just-doing-our-job.shtml. Critics of the rulemaking process have noted that the Copyright Office has often cited its lack of power to avoid handling larger policy issues in the rulemakings, instead referring critics to Congress. *See* Herman & Gandy, *supra* note 36, at 177–81 (classifying this as the second most common argument made by the Register when denying exemptions).

80. 17 U.S.C. § 1201(a)(1)(C)(v) (2012).

81. *See* Unlocking Technology Act of 2013, H.R. 1892, 113th Cong. (2013).

82. *See* Unlocking Consumer Choice and Wireless Competition Act, S. 517, 113th Cong. (2013).

83. Petition for Rulemaking of the National Telecommunications and Information Administration, *In re* Amendment of Part 20 of the Comm’n’s Rules & Regulations to Require Certain Providers of Commercial Mobile Radio Servs. To Unlock Wireless Devices Upon Request (F.C.C. Sept. 17, 2013), *available at* http://www.ntia.doc.gov/files/ntia/publications/ntia_mobile_devices_unlocking_petition_09172013.pdf.

84. *Id.* at 13–16.

85. The organization’s name originally stood for the Cellular Telecommunications Industry Association, but CTIA has used its current name as an orphan initialism devoid since 2004. Amy Storey, “Is CTIA an Acronym?” CTIA BLOG (June 1, 2009), <http://blog.ctia.org/2009/06/01/is-ctia-an-acronym>.

86. Letter from Steve Largent, President of CTIA—The Wireless Association, to the F.C.C. (Dec. 12, 2013), *available at* <http://www.ctia.org/docs/default-source/fcc-filings/ctia-letter-on-unlocking.pdf>.

sphere of the Copyright Office, is active and progressing, despite its classification as presenting insufficient harm to consumers for purposes of the rulemaking.

C. IMPROVING THE PROCESS

Ultimately, the 2012 rulemaking has shown that the process still suffers from a lack of clarity. Ambiguity remains as to what constitutes sufficient harm to noninfringing use to justify an exemption, with the Copyright Office still requiring evidence of “substantial” harm and using the term in an unclear fashion. The way “classes of works” have been defined continues to result in confusion, with the Register declining to cover “tablet” devices out of concern the class would be defined too broadly. More generally, the public response to the cell phone unlocking decision illustrates that for a process set up specifically to safeguard noninfringing use, the rulemaking is failing to safeguard unobjectionable noninfringing uses, likely because of the growing complexity of the requirements set by the Copyright Office to successfully petition for an exemption.⁸⁷ The Copyright Office seems to add an additional layer of complication in each rulemaking, despite the fact that the rulemaking process has more value in setting norms than it does in making a concrete impact on legal liability.⁸⁸

The rulemaking could be and should be improved to better accomplish its intended function. The House Commerce Committee cannot have intended the rulemaking process to be so complex and uncertain as to negate its function—namely, protecting against unintended consequences of the DMCA’s circumvention ban. Although there have been countless calls for Congress to revise the DMCA,⁸⁹ it is unrealistic to expect Congress will

87. As the EFF has noted, the Copyright Office makes six requirements on proponents of exemptions that make participation difficult for members of the public without access to specialized copyright lawyers. See VON LOHMANN & HINZE, *supra* note 37, at 3. Even specialist organizations with that expertise regularly fail to gain exemptions because the harms to consumers are dismissed as “de minimis.” See *id.* at 3–4.

88. The rulemaking only affects the ban on individual circumvention, and the statute bars use of the rulemaking analysis as defense in any other legal action. 17 U.S.C. § 1201(a)(1)(E) (2012). Someone circumventing to jailbreak a smartphone could still be sued for direct infringement and would have to mount a robust fair use defense without citing the rulemaking materials. Furthermore, unless an individual has great experience with digital protection, they would need to rely on tools created by others, which are illegal to create or distribute under § 1201(a)(2) in all circumstances. A user could have the right to circumvent but be functionally prohibited by lack of tools, giving her an empty right.

89. See, e.g., Chris Moseng, Note, *The Failures and Possible Redemption of the DMCA Anticircumvention Rulemaking Provision*, 12 J. TECH L. & POL’Y 333, 361 (2007) (dismissing the rulemaking process as a “failed” safety valve requiring intervention from Congress); Arielle Singh, Note, *Agency Regulation in Copyright Law: Rulemaking Under the DMCA and Its Broader*

revise this section of copyright law when Congress is preoccupied with economic issues and debates over government spending.⁹⁰ Until Congress takes up the call to write the next great Copyright Act,⁹¹ there will be little statutory change.

Though Congress may be unable to help, the Copyright Office is perfectly capable of modifying its approach to the rulemakings to incorporate over a decade of experience with the statute and underlying issues. The Copyright Office has grown more comfortable in its role, taking steps to clarify the necessary proof to show harm to noninfringing use⁹² and changing its position on incorporating an intended use in a “class of works” as a means to further tailor exemptions to the specific harm they are intended to address.⁹³ The public reaction to the recent rulemaking illustrated a disconnect between consumer expectations and administrative actions, but the Copyright Office is perfectly poised to learn from the experience and chart its course as a proactive, flexible agency that adapts to new information to protect both creators and consumers. This process starts with rethinking the anti-circumvention rulemaking.

III. OPPORTUNITIES FOR CHANGE

There are three main changes that would streamline the rulemakings. First, given how many proposed exemptions are renewals of currently existing exemptions, the Copyright Office should clarify the necessary burden of proof to account for available factual evidence when an exemption is considered for renewal. Second, the Copyright Office should more strongly consider fair use when conducting its analysis. The purpose of the rulemaking process was to protect noninfringing uses, of which fair use is a subset, and the four fair use factors offer a helpful, though not dispositive,

Implications, 26 BERKELEY TECH. L.J. 527, 568–70 (2011) (suggesting Congress give the Copyright Office more regulatory authority); Jackson, *supra* note 38, at 544–45 (briefly discussing potential reforms by Congress that could better protect fair use).

90. *Cf.* Todd S. Purdum, *The year the government broke*, POLITICO (Oct. 11, 2013, 5:02 AM), <http://www.politico.com/story/2013/10/the-year-the-government-broke-government-shutdown-debt-ceiling-congress-98165.html> (describing congressional deadlock and disfunction). Congress has difficulty focusing on copyright when larger policy problems are in its sights. *See, e.g.*, LITMAN, *supra* note 11, at 45 (describing how efforts to reform copyright stopped as Congress focused on World War II).

91. Register Pallante has begun calling for wide action by Congress to drastically revise the aging statute. *See* Maria Pallante, *The Next Great Copyright Act*, 36 COLUM. J.L. & ARTS 315 (2013).

92. *See supra* Section I.B.1.

93. *See supra* Section I.B.2.

analytical lens. Finally, the Copyright Office should use reasonable belief as a way of narrowing exemptions and avoiding excessive complexity when devising classes of works. All three changes would drastically improve the efficiency of the Copyright Office's anti-circumvention rulemakings, as well as provide a model for future copyright reform. Each is discussed below.

A. SHIFTING THE BURDEN FOR RENEWALS

Generally each rulemaking has taken about a year, with the exception of 2009, when it stretched for twenty months.⁹⁴ In each round, many of the proposed exemptions are identical or similar to ones from past rulemakings.⁹⁵ Despite the frequency of recurring proposals, the Copyright Office considers them *de novo*, requiring new factual evidence of harm in the record despite how difficult that proof might be to obtain.⁹⁶ This means that there must be a new factual analysis, and often a legal one, for an exemption to be recommended once more.⁹⁷

Some commenters have suggested that the Copyright Office move from a *de novo* approach to one that gives deference to previously granted exemptions.⁹⁸ Although the Copyright Office cannot ignore the *de novo* requirement, which was specifically described by the House Commerce

94. The 2009 rulemaking took an especially long time, with the Copyright Office needing to extend the previous round of exemptions as an interim rule as it finished the process. *See* Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies, Interim Rule, 74 Fed. Reg. 55,138 (Oct. 27, 2009) (to be codified at 37 C.F.R. pt. 201).

95. In 2012, the Office identified ten proposed classes of exemptions, with twenty-two total variations. Of the ten classes of exemptions, four had previously been considered in the 2009 rulemaking. Despite being forty percent of the classes, these repeated categories attracted more input and debate, and thirteen of the twenty-two variations came from those 4 repeated classes. *See Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies*, U.S. COPYRIGHT OFFICE (2011), <http://www.copyright.gov/1201/2011/initial/>.

96. *See* 2012 Recommendation, *supra* note 64, at 6–7 (requiring submission of “persuasive *current* evidence”).

97. *See id.* at 70–71 (stating that there must be a *de novo* review of evidence presented for an exemption, but that a previously developed legal analysis by the Register can be relied on if there has been no change in case law). Even here, Register Pallante noted that relying on the legal analysis would only be appropriate if the “evidence in the present record” supported it. *Id.*

98. *See* Singh, *supra* note 89, at 568; *see also* Jackson, *supra* note 38, at 546 (suggesting shifting the presumption to exemptions granted twice in a row); Aaron Perzanowski, *Evolving Standards & the Future of the DMCA Anticircumvention Rulemaking*, 10 J. INTERNET L. 1, 21 (2007) (arguing that the current insistence on proof of ongoing harm “fails to recognize” the impact of existing exemptions).

Committee as part of the rulemakings,⁹⁹ the statute does not discuss how evidence and submissions from previous rulemakings should be treated.¹⁰⁰ Therefore, the Copyright Office has additional flexibility to determine the burden, much as it did during the confusion over how to define “substantial” adverse effects.¹⁰¹ Under its current statutory authority, the Copyright Office can use a less strict requirement of current factual evidence for exemptions that have already been in place.

1. *The Current Approach to De Novo Rulemaking Does Not Account for Requests to Renew*

Currently, the Copyright Office considers all exemptions de novo, requiring that the proponents of a given exemption, including previously granted exemptions, point to “persuasive, current evidence” that the proposed behavior is likely to be noninfringing, as well as whether the circumvention ban has a current or likely future adverse impact on that behavior.¹⁰² The combination of these two requirements is more difficult to meet for proponents of previously granted exemptions than new exemptions because there is no evidence of present harm to locate, and the process is biased against exemptions targeting future harms.

Proponents of renewing an exemption have less factual evidence available to them than those advancing new exemptions. If an exemption is in effect, users can freely circumvent to avoid harm to their noninfringing use, meaning there will be no evidence of present harm. Furthermore, the Register has previously dismissed proposals guarding against future harm as “speculative.”¹⁰³ Proposals for new exemptions can often point to harms created from their absence,¹⁰⁴ but much as someone under an umbrella

99. See 2012 Recommendation, *supra* note 64, at 5 (citing Commerce Comm. Report, *supra* note 9, at 37).

100. 17 U.S.C. § 1201(a)(C) (2012) (explaining only who should be involved in the rulemaking and what factors should be considered).

101. See *supra* Section I.B.1.

102. See 2012 Recommendation, *supra* note 64, at 5–8.

103. See, e.g., *id.* at 5 (“On this record, the repair concern appears to be purely speculative. Indeed, when questioned at one of the rulemaking hearings about the need for an exemption to repair broken consoles, counsel for lead proponent EFF candidly acknowledged that she didn’t ‘know the details.’”). The EFF was advancing an exemption that would have allowed users to jailbreak their own video game consoles, but the exemption was ultimately denied. Register Peters did the same thing, such as when she dismissed a 2010 exemption because the evidence of future adverse harm failed to be “highly specific, strong, and persuasive.” 2010 Recommendation, *supra* note 56, at 231.

104. See 2006 Recommendation, *supra* note 50, at 20–21 (citing as sufficient evidence that an educational device, the Pioneer DVD player, was slow and a “significant delay” in light of its intended classroom use).

cannot prove that they are currently wet in the rain for lack of umbrella, proponents of recurring exemptions cannot show evidence of a current harm that does not exist.¹⁰⁵ This difficulty of proving a negative is complicated by the definition of “substantial” harm advanced by the Register in 2003, requiring “distinct, verifiable, and measureable impacts.”¹⁰⁶ This language suggests an emphasis on actual harm that is “measureable” and could bias the Office against renewing exemptions already in effect that have prevented the existence of ongoing harm.¹⁰⁷

Because proponents of recurring exemptions have no present harm to point to and because the Copyright Office often dismisses future harms as “speculative,”¹⁰⁸ proponents of recurring exemptions are placed in a uniquely difficult position when convincing the Copyright Office to renew an exemption. Indeed, a major reason for Register Pallante denying an exemption for cell phone unlocking was because proponents “improperly” relied on the 2010 Rulemaking for many of their factual assertions rather than present new, current evidence.¹⁰⁹ If proponents of an exemption that

105. Register Pallante has implied that the failure to gain an exemption is simply the failure of proponents to build an adequate record. *See* Pallante, *supra* note 91, at 331 n. 83 (quoting a House Judiciary Member as saying that “[t]he quality of the DMCA process depends upon the quality of the record. Future participants in the process should build an adequate record upon which an exemption may be based.”). It is difficult to build an adequate record when the burden is relatively higher than that for proponents of exemptions that have not been in effect.

106. *See supra* Section I.B.1.

107. *See* Jackson, *supra* note 38, at 532 (“Future harm cannot be verified or measured because it is harm that, by definition, does not exist yet.”).

108. *See, e.g.*, 2012 Recommendation, *supra* note 64, at 47 (describing concerns about inability to repair video game consoles as “speculative” because they could be repaired by the manufacturer under for free warranty or for a reasonable fee); 2010 Recommendation, *supra* note 56, at 234 (describing arguments an online service using DRM servers would fail as falling “into the hypothetical zone”). The 2010 proposal cited several online music and movie services that had shut down their servers, but the Register denied the exemption because the services had offered refunds, and consumers may still have access to purchased content as long as they did not change computers or operating systems or hard drives or take other similar action. *Id.* at 232–34.

109. In the 2012 Recommendation, Register Pallante wrote:

The Register is compelled to note that the record developed by the proponents is lacking and they improperly rely on the Copyright Office’s 2010 Recommendation as evidence for many of their factual assertions. Merely citing to conclusions drawn by the Register in past rulemakings does not itself create a factual record for purposes of a current rulemaking. As the Register has noted many times in the past, the record must be developed and reviewed *de novo* in each proceeding; a proponent is required to present a *prima facie* case, based on current evidence, that it is entitled to the proposed exemption.

has already proved itself once must point to nonexistent or difficult-to-gather evidence of a harm that was mitigated by a previously granted exemption, the rulemaking risks eliminating noninfringing uses of copyrighted works despite Congress's intent to preserve them. Without addressing this discrepancy, the Copyright Office cannot effectively fulfill its statutory role under the DMCA.

2. *Requests to Renew Exemptions Should Only Require Factual Continuity and Proof of Reliance*

The best solution is to modify the necessary factual showing for exemptions that have been granted previously. The Copyright Office should instead give deference to the factual record from when the exemption was granted, requiring only that proponents prove ongoing reliance on the exemption and that there has not been radical change in the factual background since the previous rulemaking. Detractors of the exemption should bear the burden of presenting evidence either that sufficient factual change justifies a new analysis of adverse impact or that new harm to copyright owners' interests outweighs the public benefit of keeping the exemption as it was. For modifications of an exemption beyond its previous incarnation, a party that wanted to expand the scope of an exemption would bear the burden of proving that the additional modification both meets the statutory requirements and is not covered by the current exemption.

Such a process would preserve the de novo nature of the rulemaking by not permitting exemptions to persist without additional evidence presented at each round. To maintain an exemption, a party would be required to step forward and submit evidence that noninfringing users of copyrighted works were using or relying upon the exemption. A reliance requirement would ensure that (1) exemptions that fail to have value for users of copyrighted works would not remain in effect and (2) the Copyright Office would have additional evidence with which it could evaluate whether the exemptions it grants are making a tangible impact on noninfringing use.

Shifting the burden of proof for previously granted exemptions solves the stated problem regarding proponents' difficulty proving a negative to renew an exemption. The current system places a difficulty on proponents of exemptions of proven value that is not placed on proponents of new exemptions. Placing such an evidentiary burden on proponents of renewing exemptions risks the expiration of socially valuable exemptions despite their continued need. Such a situation almost happened in 2009, when the Register declined to renew an exemption permitting circumvention of ebooks so that

print-disabled readers could enable text-to-speech functionality and enjoy the literature.¹¹⁰ In her recommendation, the Register pointed to the sparse factual record submitted by the American Federation for the Blind, saying they had submitted no evidence showing that the circumvention ban “actually has had an adverse effect” on the ability of print-disabled readers to engage in noninfringing uses of ebooks.¹¹¹ Admittedly the offered evidence was very thin,¹¹² but the Librarian overruled the Register’s recommendations and granted the exemption, citing “statements on the likelihood of access not being available to blind individuals,” among other factors.¹¹³ Both the Register and Librarian felt strongly that an exemption would be socially beneficial,¹¹⁴ but the Register was uncomfortable recommending an exemption in light of previously established rules about the factual requirements for proposed exemptions examined *de novo*. By modifying the approach to recurring exemptions as suggested, situations like this could be avoided without the Librarian needing to exercise his discretion.

Altering the Copyright Office’s approach to these exemptions would have the added benefit of making modifications better considered with a more diverse factual record. By forcing all proponents of modification to offer strong evidence of the benefits over the existing exemption, detractors of an exemption (copyright owners interested in removing the exemption entirely) as well as consumer advocates (trying to expand the scope of an exemption to be broader than initially envisioned) will have equal evidentiary burdens in persuading the Register to modify the exemption. The current rulemaking process favors the interests of copyright holders, as they have only to insist that the fairly weighty burden of the statute has not been met,

110. *See* 2010 Recommendation, *supra* note 56, at 261–62.

111. *Id.* at 250. The American Federation for the Blind had only submitted a sample of five ebooks, four of which would not be read by screen readers because of digital protection. *Id.* at 248–50. It should be noted that the Register was requesting evidence of harm from the ban after the circumvention ban had been exempted for seven years.

112. The American Federation for the Blind did a survey of five ebooks, four of which it found inaccessible. *Id.* at 248–50. Two of the books were no longer protected by copyright, meaning they were not covered by the circumvention ban. *Id.* at 255–56.

113. Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies, 75 Fed. Reg. 43,825, 43,838–39 (July 27, 2010) (to be codified at 37 C.F.R. pt. 201) [hereinafter 2010 Exemption]. The Librarian also cited the lack of opposition to the exemption and the “broad benefits in society” in renewing the exemption. *Id.*

114. *See id.* (“[T]here are broad benefits to society in making works accessible to the visually impaired.”); 2010 Recommendation, *supra* note 56, at 261 (“The Register fully supports universal accessibility to ebooks for the blind and visually impaired.”).

regardless of clear consumer harm.¹¹⁵ Setting up a tug of war between two parties, with the status quo in the middle, would create an adversarial system wherein both sides have to present convincing evidence to the Copyright Office that their suggested outcome is best. In such a situation, the truth is more likely to come out through parties arguing both sides, giving the Copyright Office better information about the advantages and disadvantages of a given change than if the process favored one party over another.

This change is consistent with the intent of Congress and the Copyright Office's statutory authority. The statute itself provides little guidance as to how the Copyright Office should handle its role in the rulemaking process, stating simply that the Copyright Office should consider whether persons using certain classes of works would likely be harmed in the succeeding three years in making noninfringing use of a work.¹¹⁶ The House Commerce Committee sheds somewhat more light on Congress's intent. The Commerce Committee Report explains the rationale for adding the rulemaking process, specifically calling it a "fail-safe" mechanism,¹¹⁷ to prevent, among other things, "the adoption of business models that depend upon restricting distribution and availability, rather than upon maximizing it."¹¹⁸ The Committee was also concerned that the circumvention ban would "undermine Congress' longstanding commitment to the principle of fair use," thus it set up the rulemaking provision to "respond[] to this concern."¹¹⁹

The Commerce Committee Report requires that rulemaking be conducted *de novo* but says little else. In describing the *de novo* approach to rulemaking, the Register has cited the page of the House Report stating "the assessment of adverse impacts on particular categories of works is to be determined *de novo*."¹²⁰ Although the Commerce Committee Report is helpful to understand the purpose of and intent behind the rulemaking process, delving too deeply into the factual specifics in the report would be

115. For example, in 2006, opponents of the DVD media studies exemption argued that because a class could not incorporate use, any exemption for audiovisual works would inherently be too broad to justify under the statute. *See* 2006 Recommendation, *supra* note 50, at 14–15. The wireless industry was similarly able to convince the Register that an exemption for phone unlocking was unwarranted because more phones being sold unlocked, which meant circumvention was not necessary for consumers to obtain an unlocked phone. 2012 Recommendation, *supra* note 64, at 87.

116. *See* 17 U.S.C. § 1201(a)(B) (2012).

117. Commerce Comm. Report, *supra* note 9, at 36.

118. *Id.*

119. *Id.* at 35.

120. *See, e.g.*, 2012 Recommendation, *supra* note 64, at 5 (quoting Commerce Comm. Report, *supra* note 9, at 37).

misleading. A number of modifications were made to the rulemaking section when the House and Senate reconciled their different versions,¹²¹ and the draft of the bill discussed in the Commerce Report differs from the final version.¹²² At the time the report was written, the Commerce Committee may not have considered how recurring exemptions would be handled, as even the Copyright Office needed to figure those details out during early rulemakings.

The Commerce Committee Report's statement that the rulemaking should be conducted *de novo* does not bar the Copyright Office from changing the evidentiary burden for recurring exemptions. As stated earlier, the current rulemaking process in practice has a heightened burden for proponents of a recurring exemption.¹²³ The report is clear that the rulemaking process was set up to protect noninfringing uses of copyrighted works, ensuring that the public would have access to those works "that are important to education, scholarship, and other socially vital endeavors."¹²⁴ Exemptions that have passed statutory muster once are likely to fall within these categories. Making the suggested change prevents underprotecting these uses by placing excessive factual burdens on their renewal.

The *de novo* requirement is still met by the requirement that an exemption have proven public usage or reliance to gain the presumption of validity. For the rulemaking to be *de novo*, exemptions cannot be renewed as a matter of course, without a single interested party proposing the exemption. Exemptions must be proposed every three years anew, and the requirement of having proof of use would necessarily require a party to organize and propose the exemption, using that factual evidence as proof of the need for the exemption. However, given that granted exemptions cannot have current proof of harm in their absence, the Register certainly has the flexibility to require a different kind of proof for those special cases. The lack of statutory guidance on how to handle these situations, coupled with the stated intention of the Commerce Committee to protect fair use,¹²⁵ gives the Copyright Office the ability to treat recurring exemptions differently by

121. *See supra* Section I.A.

122. For example, the Report states that the process is to be conducted every two years, despite the final law conducting it every three years. *See* Commerce Comm. Report, *supra* note 9, at 37.

123. *See supra* Section III.A.2

124. Commerce Comm. Report, *supra* note 9, at 36.

125. *Id.* at 35–36. Again, remember that the House Commerce Committee was the originator of the rulemaking proceedings in the DMCA. LITMAN, *supra* note 11, at 140–41 (describing a legislative compromise that directed the Commerce Department to promulgate exemptions to § 1201).

expecting factual evidence more in line with the evidence that would be reasonably available to a proponent.

A potential reason for the current difficulty with proving future adverse impacts is the Copyright Office's reliance on the House Manager's Report, which states that exemptions for future harms should be granted only in "extraordinary circumstances."¹²⁶ As other commenters have noted, the House Manager's Report is not a reliable indicator of Congress's intent for the rulemaking process.¹²⁷ Not only was the report written after the full House passed the bill,¹²⁸ but the authors on the House Judiciary Committee were very much embroiled in a turf war with the Commerce Committee, upset that their historical authority over copyright issues had been usurped.¹²⁹ Given that the chief counsel for the House Judiciary Committee Subcommittee on Intellectual Property, Mitch Glazier, was heavily involved in drafting the original, more restrictive bill,¹³⁰ it should come as no surprise that the committee he worked with released a report that characterized the rulemaking process as more limited than its drafters intended. The intent of the rulemaking process should be read from the reports of its drafters, not outside lawmakers with separate, political interests.

Furthermore, the rulemaking process has seen burden shifting in a handful of cases, though it was not explicitly called out as such. In the 2009 rulemaking, the Register made it very clear that the evidence advanced by the American Federation for the Blind ("AFB") was insufficient to show a need for an exemption on ebooks to help blind consumers.¹³¹ No other evidence was offered in support of the exemption other than the AFB's initial submission,¹³² yet the Librarian said he was convinced by "statements [on the

126. STAFF OF H. COMM. ON THE JUDICIARY, 105TH CONG., SECTION-BY-SECTION ANALYSIS OF H.R. 2281 AS PASSED BY THE UNITED STATES HOUSE OF REPRESENTATIVES ON AUG. 4, 1998 6 (Comm. Print 1998) [hereinafter House Manager's Report].

127. See, e.g., Herman & Gandy, *supra* note 36, at 169 (describing the Judiciary Committee, writing after passage of the bill, as wanting stricter standards than the Commerce Committee); Perzanowski, *supra* note 98, at 14 (describing the House Manager's Report as offering a "slightly different interpretation" than the Commerce Committee Report).

128. See Herman & Gandy, *supra* note 36, at 169.

129. See LITMAN, *supra* note 11, at 137–38.

130. See *id.* at 137. Glazier is now the Senior Executive President at the Recording Industry of America Association ("RIAA"). See *Executive Bios*, RECORDING INDUSTRY ASSOCIATION OF AMERICA, http://www.riaa.com/aboutus.php?content_selector=about_us_exec_bios (last visited Feb. 8, 2014).

131. See 2010 Recommendation, *supra* note 56, at 253 (admonishing proponents of the exemption for not listening to her previous warning to provide a richer evidentiary record).

132. See *id.* at 247–50 (describing the AFB's submission as the only evidence offered in support of the exemption).

record] on the likelihood of access not being available” to the blind.¹³³ AFB’s only offered statements were in their initial submission, noting among other things that the situation around ebook restrictions “ha[d] not changed appreciably” since 2002.¹³⁴ In light of the scant evidence offered in support of the exemption, the Librarian seems to have done something very similar to the approach suggested above, giving deference to a previously granted exemption for lack of opposition and the evidence that advocates still cared enough about it to propose it anew. However, as the stated reason for granting the exemption was the *likelihood* of harm (not evidence of harm, simply statements about it), the justification seems weak in light of the usual requirement of proving “substantial” adverse effects. For the sake of transparency, it would have been better policy for the Librarian to state his reasons directly.

The new Register did something similar in the 2012 rulemaking, where in the introduction of her recommendation she made a distinction between factual showings and legal analyses.¹³⁵ Previously, the Register had simply stated that determinations were made de novo and that facts must be proven anew in each rulemaking. However, this distinction was the basis for the Register’s decision to renew the exemption permitting jailbreaking of cell phones to run third party applications.¹³⁶ While reusing the previous legal analysis, the Register did not entirely throw out the factual analysis. Instead, she found factual evidence of adverse impact on noninfringing use in little over a page, swayed by the fact that the smartphone had been widely adopted and unauthorized (jailbroken) apps were enjoying sales success.¹³⁷ This is very

133. 2010 Exemption, *supra* note 113, at 43,838.

134. Comments of the American Foundation for the Blind, *In Re Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies* at 3, No. RM 2008-8, available at <http://www.copyright.gov/1201/2008/comments/american-foundation-blind.pdf>.

135. 2012 Recommendation, *supra* note 64, at 6.

136. *See id.* at 71 (citing 2006 Recommendation, *supra* note 50, at 40 (finding that the previous legal analysis and factual posture was the same as the prior rulemaking and thus should be renewed)):

Nonetheless, where, as here, the Register of Copyrights has previously developed a legal analysis, and there has been no pertinent change in statutory or case law – and no new persuasive arguments have been offered in the current proceeding – it is appropriate to rely upon the earlier legal analysis, provided that the evidence in the present record supports it.

2012 Recommendation, *supra* note 64, at 71. Note that the cited language was for the exemption permitting blind users to circumvent ebooks, the same exemption that would vex the Register three years later.

137. *See* 2012 Recommendation, *supra* note 64, at 74–76.

similar to the suggested approach, using evidence of exploitation and reliance on a previous exemption as factual evidence that it is still needed.

In both of these cases, the outcome of the Librarian's and Register's decisions map well with this Note's proposed solution. There is evidence that perhaps the impetus for these decisions was very close to the stated rule. However, in both cases, the reasoning for each outcome was neither explicit nor based in a clear, identifiable process. For purposes of transparency, the rulemaking process should make explicit what has been developing implicitly for several years: exemptions that have been previously granted have special considerations that should be accounted for in the ground rules of the rulemaking proceedings. Because the Copyright Office has already been doing something similar under its current authority, the Office should adopt this clear, coherent approach to renewed exemptions for better transparency and consistency in outcome.

B. INCORPORATING FAIR USE

1. *The Copyright Office Has Failed to Sufficiently Safeguard Fair Use*

Another common criticism of the rulemaking process is the way it has failed to account for fair use. The Electronic Frontier Foundation ("EFF") in 2005 described the rulemaking process as putting fair use in a "deep freeze" because before a user can have digital fair use questions adjudicated in court, they need access to the underlying work, which is illegal unless the work employs no technical protections—such as digital rights management ("DRM")—or the Copyright Office explicitly grants an exemption for that "class of works."¹³⁸ Since the EFF's criticism in 2005, the Register has occasionally incorporated a fair use analysis when discussing exemptions,¹³⁹ but the EFF's point remains now that DRM is common and digital copies of works are becoming the prevalent, often only, format of some creative content. Without the ability to access unprotected works, consumers of copyrighted content will be unable to make fair use of those works because consumers would have liability under § 1201 regardless.

The Copyright Office recognizes that concerns about the DMCA's effect on fair use were the motivating factors in the establishment of the

138. See VON LOHMANN & HINZE, *supra* note 37, at 6–8.

139. See 2010 Recommendation, *supra* note 56, at 49–53, 94–100, 183–90 (conducting a fair use analysis for three proposed exemptions, all of which were granted). *But see* 2006 Recommendation, *supra* note 50, at 29 (rejecting as "improper" generalizing about fair use to analyze an exemption because there was too much potential for facts to vary within the exemption).

rulemaking process.¹⁴⁰ The House Commerce Committee intended the rulemaking process as a “fail-safe” to guard against a society where hard copies of works were eliminated and permanent encryption and protection of copyrighted works became the norm, preventing consumers from accessing works without violating the DMCA.¹⁴¹ This is the case in many industries, where it is increasingly difficult to rent movies¹⁴² or purchase releases from artists¹⁴³ outside of a digital context. The scenario that Congress worried about is on the doorsteps of the American public, and that change in circumstance merits a change in the assumptions made by the Copyright Office.

Part of the issue is that the statute directs the Copyright Office to grant exemptions that enable “noninfringing uses,” a term encompassing, but different from, fair use.¹⁴⁴ This statutory mandate forces the Copyright Office into making what one commenter has called a “binary determination” that a use is or is not noninfringing,¹⁴⁵ because an exemption must be “narrowly tailored” to a very specific harm to users of a particular class of works.¹⁴⁶ Because fair use is intensely fact-specific,¹⁴⁷ the Copyright Office has had difficulty recommending exemptions that would be fair use in some but not

140. 2003 Recommendation, *supra* note 36, at 7–8.

141. Commerce Comm. Report, *supra* note 9, at 36.

142. See Andrea Peterson, *Netflix has won: Blockbuster is closing its last retail stores*, THE WASHINGTON POST (Nov. 6, 2013), available at <http://www.washingtonpost.com/blogs/the-switch/wp/2013/11/06/netflix-has-won-blockbuster-is-closing-their-last-retail-stores>. With the fall of Blockbuster, Redbox remains one of the few players with name recognition willing to serve a market for physical rentals. See Gina Hall, *Blockbuster loss may be Redbox gain*, L.A. BIZ (Nov. 8, 2013), <http://www.bizjournals.com/losangeles/news/2013/11/07/blockbuster-loss-may-be-redbox-gain.html>.

143. Increasingly music albums are being released in digital form only, on online storefronts like iTunes. See, e.g., Steve Marinucci, *New Beatles digital only album out on iTunes today*, EXAMINER.COM (July 24, 2012), www.examiner.com/article/new-beatles-digital-only-album-out-on-itunes-today (describing the release of a digital exclusive Beatles album on iTunes); *Bio: Album*, JAYPARK.COM, <http://www.jaypark.com/en/bio/album.asp> (last visited Nov. 11, 2013) (showing multiple albums that were released only as digital singles).

144. 17 U.S.C. § 1201(a)(1)(c) (2012). Fair uses are noninfringing, but so are other actions such as creating archival copies under § 108’s exception for archives and libraries or exercising consumer rights under the first sale doctrine.

145. Perzanowski, *supra* note 98, at 21.

146. See 2003 Recommendation, *supra* note 36, at 84. The Copyright Office has generally viewed its authority narrowly, and the Register has looked favorably upon proposed exemptions that are “narrowly tailored.” See, e.g., 2006 Recommendation, *supra* note 50, at 62 (noting proponents for a security exemption “acknowledged” that an exemption should be “narrowly tailored” to address very specific form of harm); 2010 Recommendation, *supra* note 56, at 253–54 (discussing the inadequacy of a proposed exemption by contrasting it with a previously granted exemption that was more “narrowly tailored” to the harm).

147. See *Campbell v. Acuff-Rose Music*, 510 U.S. 569, 577–78 (1994).

all factual situations.¹⁴⁸ It has also rarely conducted its own fair use analysis when analyzing the merits of a proposed exemption, but that has changed in recent years.¹⁴⁹

In recent rulemakings, the Copyright Office has grown more flexible in incorporating fair use. In 2010, the Register recommended an expanded exemption for circumvention of protection on DVDs to make documentaries and noncommercial videos.¹⁵⁰ In her analysis, the Register conducted a broad fair use analysis for the proposed exemption for creating noncommercial videos, ultimately finding that despite many examples provided by the proponents not qualifying as fair use, many examples could be considered fair use.¹⁵¹ In the same rulemaking, the Register also used fair use as justification to recommend an exemption that allowed users to “jailbreak” their smartphones, holding that such behavior “fits comfortably within the four corners of fair use.”¹⁵² The Register’s successor, Maria Pallante cited and reiterated this fair use analysis.¹⁵³ Despite previously opposing reliance on fair use as a criterion for analysis, the Copyright Office has in recent years begun giving fair use a larger role in its rulemaking calculations.

However, this is only done for occasional exemptions, leaving proponents responsible for arguing fair use and hoping the Copyright Office takes that argument up in its final recommendations. There is no guarantee that the Copyright Office will consider fair use unless it considers it applicable to a specific instance.

2. *The Register Should Explicitly Bring in Fair Use as Part of Exemption Analysis to Better Achieve the Intent of Congress*

The simplest solution to the occasional inclusion of fair use is the most direct: the Copyright Office should explicitly conduct a fair use analysis as part of the statutory analysis of the § 1201 factors. The analysis from the fair use determination would not be dispositive, but it would contextualize analysis of the statutory factors and give the Register a better perspective on whether to approve, deny, or modify a proposed exemption.

148. See 2003 Recommendation, *supra* note 36, at 84–85 (“Defining a class in such a manner would make it applicable to all works and would not provide any distinctions between varying types of works or the measures protecting them.”).

149. See, e.g., 2010 Recommendation, *supra* note 56, at 72 (conducting a fair use analysis for noncommercial video); *id.* at 91 (doing the same for “jailbreaking” of mobile phones).

150. *Id.* at 72.

151. *Id.* at 52.

152. *Id.* at 91.

153. 2012 Recommendation, *supra* note 64, at 77.

The DMCA directs the Librarian to consider the following factors:

- (i) the availability for use of copyrighted works;
- (ii) the availability for use of works for nonprofit archival, preservation, and educational purposes;
- (iii) the impact that the prohibition on the circumvention of technological measures applied to copyrighted works has on criticism, comment, news reporting, teaching, scholarship, or research;
- (iv) the effect of circumvention of technological measures on the market for or value of copyrighted works; and
- (v) such other factors as the Librarian considers appropriate.¹⁵⁴

Several of these factors mirror text from other sections of the Copyright Act, fair use in particular.¹⁵⁵ Fair use itself is not listed as one of the factors, but shades of it pervade these factors for consideration. In light of a developed record from over twelve years of rulemaking, it is clear that more room can and should be made for fair use within the general analysis done by the Copyright Office.

Because the Librarian is allowed to consider other factors he “considers appropriate,” the Copyright Office should exercise its authority and conduct a fair use analysis for each proposed exemption. It is entirely “appropriate” to consider the doctrine underlying the rulemaking process, set up by the House Commerce Committee as a “fail-safe” out of concern that the circumvention ban would “undermine” Congress’s historic commitment to fair use.¹⁵⁶

When analyzing a rulemaking, the Register should first do a fair use analysis of the proposed exemption, using facts provided by proponents and opponents of an exemption. The fair use analysis would be used to better understand and contextualize the other statutory factors. For example, a proposed use that is favorable under a fair use analysis would strongly suggest that the prohibition would have a strong impact on criticism, comment, news reporting, etc. (when those factors are implicated). It would not have as strong of an impact on the availability of copyrighted works, which would be analyzed as the Register has traditionally done. Because the fair use analysis explores the market impact of the desired use, the analysis would be informative to that statutory factor. Additionally, because fair use

154. 17 U.S.C. § 1201(a)(1)(C) (2012).

155. *See* 17 U.S.C. § 107 (2012), which lists in the preamble “criticism, comment, news reporting, teaching (including multiple copies for classroom use), scholarship, or research” as activities fair use is meant to protect. The fourth factor also places emphasis on the market effect of a claimed fair use. *Id.* § 107(4).

156. Commerce Comm. Report, *supra* note 9, at 35–36.

examines market harm differently depending on whether a use is “transformative,” this analysis might better isolate the relevant markets for the work.¹⁵⁷

By starting off with a fair use analysis, the Register will be better able to focus on the thrust of the rulemaking process: does the prohibition on circumventing DRM prevent users from making lawful (noninfringing) use of copyrighted works? Fair use often serves as a proxy for whether an activity is socially beneficial,¹⁵⁸ and bringing in the fair use analysis to better contextualize the factors that the Librarian must consider will appropriately map the outcomes of rulemaking decisions with the public interest the process is intended to safeguard.

Additionally, a fair use analysis will better capture exemptions before the Register, which do not always implicate archives, education, or research. In multiple rulemakings, the Register has not used the second and third factors for analysis when they are not implicated, such as the proposed exemption for jailbreaking smartphones¹⁵⁹ and the exemption for cell phone unlocking for use on other networks, where the Register found that none of the four factors applied.¹⁶⁰ When multiple or none of the factors are relevant to an exemption, the Register has no guidepost for analyzing an exemption other than looking at factual evidence of harm on the record.¹⁶¹ To avoid decisions straying too far from the intent of the statute, fair use should be the guidepost that helps evaluate exemptions and their alignment with the intent of the Commerce Committee. Because fair use is broader than the

157. See 2010 Recommendation, *supra* note 56, at 102 (conducting a brief analysis of the market harm factor for exemption purposes). The Register’s discussion of the market harm factor within a fair use analysis was considerably longer. Compare *id.* at 97–100 with *id.* at 102. The fair use analysis was likely helpful to determining market impact under the statutory factor.

158. See, e.g., *Sony Corp. v. Universal City Studios, Inc.*, 464 U.S. 417, 478–79 (1984) (Blackmun, J., dissenting) (describing fair use as providing external benefits “from which everyone profits”); *Princeton Univ. Press v. Michigan Document*, 99 F.3d 1381, 1400 (6th Cir. 1996) (“[T]he ultimate inquiry under the first fair use factor is whether the type of use being challenged is, by its nature, likely to benefit society without excessively diminishing the incentives to create new works.”). The first fair use factor is meant to analyze social benefit, so it can be a helpful guidepost in determining the value of exemptions.

159. See 2010 Recommendation, *supra* note 56, at 101–02 (“Like the previous factor, the recommendation is unlikely to affect the interests in this factor. This factor also appears to be neutral.”).

160. See *id.* at 150 (finding that all four factors were “neutral” because unlocking phones for use on other mobile networks would not impact archival, news reporting, scholarship, etc.).

161. See *id.* at 150–54 (criticizing opponents of the exemption for using the forum to protect a business model, but otherwise offering little evidence the Register deemed valid).

rulemaking factors, fair use can provide applicable guidance for situations where the narrower statutory factors in Section 1201(a)(1)(C) fall short.

A potential concern with this approach is that if Congress wanted fair use to be considered in the DMCA, it easily could have included such language. Indeed, the only mention of fair use in the DMCA is a short note in § 1201 that the law is not meant to affect rights or defenses to copyright infringement, including fair use.¹⁶² However, fair use was clearly important to the Commerce Committee, which mentioned multiple times in its report how the doctrine benefited both consumers and many industries.¹⁶³ An additional statement in the House report by two Representatives, Scott Klug and Rick Boucher, adds more context. Klug, who introduced an amendment that added the rulemaking process to the bill, still “remain[ed] troubled” by the potential implications of the DMCA on fair use.¹⁶⁴

Though § 1201 is not subject to the fair use defense, fair use is not entirely barred. Representative Klug and his colleague had originally introduced language extending fair use to the circumvention ban in § 1201 but were stonewalled by colleagues whose motivations were never made clear.¹⁶⁵ Despite inability to get an explicit fair use protection in the anti-circumvention provisions, the Congressmen intended the rulemaking to “focus on the extent to which exceptions and limitations to this prohibition are appropriate and necessary to maintain balance in our copyright laws.”¹⁶⁶

The failure of the Representatives to explicitly bring fair use into the statute should not be considered evidence that Congress intended the rulemakings to avoid discussing fair use. First, a later account of the negotiations notes that objections to an explicit fair use privilege were rooted

162. 17 U.S.C. § 1201(c).

163. See Commerce Comm. Report, *supra* note 9, at 25 (“[Fair use] is critical to advancing the personal interests of consumers. Moreover, as many testified before the Committee, it is no less vital to American industries.”).

164. *Id.* at 85. Klug’s amendment originally gave the power to grant exemptions to the Secretary of Commerce. See *id.* at 85–86. The rulemaking was altered at the last minute to be based in the Copyright Office with input from the Department of Commerce because of Senate political concerns over retaining Judiciary Committee authority (and thus lobbying attention). See LITMAN, *supra* note 11, at 142–44.

165. See Commerce Comm. Report, *supra* note 9, at 86 (quoting WIPO Copyright Treaty, *supra* note 15, at 2) (“For reasons not clear to us, and despite the WIPO Treaty language ‘recognizing the need to maintain a balance between the rights of authors and the larger public interest, particularly education, research and access to information * * *,’ our proposal was met with strenuous objection.”). Likely the other Committee members were being heavily lobbied by industries that desire strong copyright protection, such as the motion picture and recording industries. See *supra* Section I.A.

166. Commerce Comm. Report, *supra* note 9, at 86.

in concerns by the content industry that it would “provide a roadmap” to companies distributing circumvention tools and would weaken legal safeguards for protection technologies, rendering them ineffective.¹⁶⁷ Fair use as an informative tool would avoid weakening protection technologies because exemptions would still need additional evidence and recurring action by proponents. Second, it is difficult to argue that the DMCA had any singular “intent” behind it, given the sharply divisive interests exerting their influence and compromising in the end product.¹⁶⁸ Rather than attempt to divine what particular factions wanted from the bill, it instead makes sense to look at the larger themes and claims by the Commerce Committee about its goal to protect fair uses through the rulemaking process.

Indeed, the Register has gained new insights on appropriate exemptions through a decade of rulemakings. From an initial approach that rebuffed calls to allow broad fair use,¹⁶⁹ the Register has brought fair use in as a growing part of analyzing many exemptions.¹⁷⁰ Because of the experience the Copyright Office has gained from multiple rounds of rulemaking, as well as a growing understanding of the underlying policy issues implicated in the rulemaking process, the Office has a strong justification to more fully incorporate fair use. This analysis would not be a binding factor but instead would better inform and contextualize the statutory factors, in line with the expectations of the Congressional members who drafted the rulemaking provision.¹⁷¹ As Representative Scott Klug and his colleague Representative Rick Boucher noted, “Whatever protections Congress grants should not be wielded as a club to thwart consumer demand for innovative products, consumer demand for access to information, consumer demand for tools to

167. LITMAN, *supra* note 11, at 138.

168. See Herman & Gandy, *supra* note 36, at 189 (“More realistically, there is no primary intent behind § 1201, but rather a clash of hopes and wishes that tumbled out in the form of an awkwardly worded statute.”); see also LITMAN, *supra* note 11, at 133–145 (discussing the bargaining process leading to the final text of § 1201).

169. See 2003 Recommendation, *supra* note 36, at 54–55. Though the Register could have recommended a broad exemption permitting archival of computer software and video games, she stated it was “improper” to “generalize” the parameters of fair use because it was too fact-based to be generally embodied in an exemption. *Id.*

170. See, e.g., 2010 Recommendation, *supra* note 56, at 49–53 (conducting a fair use analysis on an exemption allowing for circumventing of DVD protection for educational, documentary, and noncommercial videos); *id.* at 92–100 (conducting a fair use analysis on jailbreaking smartphones to permit running third-party applications); *id.* at 183–86 (conducting a fair use analysis to determine the noninfringing nature of circumventing technological protection measures in order to investigate and fix security vulnerabilities).

171. See Commerce Comm. Report, *supra* note 9, at 86. The Congressmen clearly saw the rulemakings as an imperfect but viable avenue to protect the public interest in using copyrighted works without permission for socially beneficial activities.

exercise their lawful rights, and consumer expectations that the people and expertise will exist to service these products.”¹⁷²

C. REVISITING “CLASSES OF WORKS”

1. *The Current Approach to Narrowing Exemptions by Use and User Are Too Technical*

Although it has become more flexible in defining “classes of works” for purposes of the rulemaking, the Copyright Office uses an approach that is still overly technical. Much as the Copyright Office has grown more comfortable using fair use to analyze exemptions, it has grown more flexible in how it defines “classes of works” for purposes of granting exemptions, defining classes based on specific uses or users.¹⁷³ Although this has enabled a number of socially beneficial exemptions,¹⁷⁴ it has also introduced complexity into the system that could impact the ability of ordinary citizens to participate in the rulemaking process and understand the extent of their rights. Although narrowing exemptions by incorporating the use has given the Copyright Office sufficient granularity to feel comfortable under its statutory authority, the Office’s method of narrowing has also resulted in increasingly messy and complicated exemptions.

The most recent rulemaking exemplifies this problem of increasing complexity. A particularly contentious exemption, the exemption permitting users to break protection on DVDs, was recommended by the Register as a dense, four-paragraph block of single-spaced text that took over two pages to spell out.¹⁷⁵ One of the four variations is reproduced here for illustration:

172. *Id.* at 87.

173. *See* 2000 Exemption, *supra* note 33, at 64,559. The Register refused to incorporate what she called “external criteria” such as a specific uses or users within a “class of works.” *Id.* However, this logic changed in 2006, when she granted an exemption for DVDs that were held in a university’s film studies library, when circumvention was for educational use in the classroom. *See* 2006 Recommendation, *supra* note 50, at 24. This was done by a bit of statutory interpretation that had apparently been overlooked for the previous six years because of inadequate facts from prior rulemakings. *See id.* at 18 (placing emphasis on the phrase “such users” in the statute and drawing the implication that a “class of works” can include users). A more likely explanation is that the previous stance towards incorporating a use or user would have led to an inequitable outcome for educators that the Register could not justify.

174. Every one of the five recommended exemptions in 2012 was qualified by the purpose of circumvention. *See* 2012 Recommendation, *supra* note 64, at 2–3. Of the five main classes of works recommended for exemption by the Register in 2010, four included language specifying the purpose of the circumvention and use to which the work was being put. *See* 2010 Recommendation, *supra* note 56, at 1–2.

175. *See* 2012 Recommendation, *supra* note 64, at 140–42.

Motion pictures, as defined in 17 U.S.C. § 101, that are lawfully made and acquired via online distribution services and that are protected by various technological protection measures, where the person engaging in circumvention believes and has reasonable grounds for believing that circumvention is necessary because reasonably available alternatives, such as noncircumventing methods or using screen capture software as provided for in alternative exemptions, are not able to produce the level of high-quality content required to achieve the desired criticism or comment on such motion pictures, and where circumvention is undertaken solely in order to make use of short portions of the motion pictures for the purpose of criticism or comment in the following instances: (i) in noncommercial videos; (ii) in documentary films; (iii) in nonfiction multimedia ebooks offering film analysis; and (iv) for educational purposes in film studies or other courses requiring close analysis of film and media excerpts, by college and university faculty, college and university students, and kindergarten through twelfth grade educators. For purposes of this exemption, “noncommercial videos” includes videos created pursuant to a paid commission, provided that the commissioning entity’s use is noncommercial.¹⁷⁶

Calling this text “complicated” would be an understatement.

Other exemptions from the most recent rulemaking exhibit similar added complexity. The recurring exemption for the blind to use ebooks was further modified, narrowed down from its previous incarnations to require that the “the rights owner is remunerated, as appropriate, for the price of the mainstream copy of the work as made available to the general public through customary channels,”¹⁷⁷ something the Register had not required in the previous three exemptions. While the Copyright Office is understandably concerned about making exemptions that stretch too broadly, narrowing to such a level of granularity makes exemptions increasingly complex and inaccessible, particularly to the general public, which is meant to benefit from the exemptions.

As a result of the increasingly complicated requirements that the Copyright Office sets in rulemakings, individual participation in the rulemaking process has decreased considerably since the first rulemaking. In 2000, the Copyright Office received 235 comments, many from individuals

176. *Id.* at 141.

177. *Id.*

representing themselves.¹⁷⁸ This number fell drastically in the subsequent round,¹⁷⁹ after the Register clarified that proponents needed to show evidence of “substantial” adverse impact and could not define a class of works with a function-based limitation.¹⁸⁰ In the most recent rulemaking, only five comments were submitted by individuals not represented by attorneys,¹⁸¹ and their submissions were generally short¹⁸² and quickly dismissed for “insufficient factual or legal analysis.”¹⁸³

The process, as noted by the EFF, does not facilitate public involvement.¹⁸⁴ Meeting the requirements set by the Copyright Office, which have changed in significant ways over the course of previous rulemakings,¹⁸⁵ requires assistance from copyright attorneys and technical experts.¹⁸⁶ This increasing complexity has arisen out of the rulemaking process, including how exemptions have been increasingly narrowed by the Copyright Office. It is a small wonder that there was so much public outcry over the 2012 jailbreaking decision when the process leading to that decision was not easily understood by non-lawyers.

Despite the considerable policy implications of rulemaking outcomes, the shifting requirements for exemptions combined with often densely worded final exemptions leave little room for regular, non-legal members of the public to influence rulemakings or understand their rights after exemptions have been granted. Furthermore, as discussed in Section III.B.1, the prevalence of digital-only content means that the complicated language of exemptions may be the only avenue to enable fair use, despite fair use being the realm of the courts rather than an administrative agency. There must be a better way to make the rulemaking process and decisions accessible to ordinary consumers while enabling more input from the courts on how fair

178. See *Post-Hearing Comments: Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies, 2000*, U.S. COPYRIGHT OFFICE, <http://www.copyright.gov/1201/comments> (last visited Feb. 1, 2014).

179. See *Post-Hearing Comments: Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies, 2003*, U.S. COPYRIGHT OFFICE, <http://www.copyright.gov/1201/2003/comments/index.html> (last visited Feb. 1, 2014) (displaying a total of fifty submissions, many by organizations).

180. See *supra* Section I.B.1.

181. See *Proposed Classes: Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies, 2011*, U.S. COPYRIGHT OFFICE, <http://www.copyright.gov/1201/2011/initial/> (last visited Feb. 1, 2014).

182. See, e.g., *Submission by Kellie Heistand, 2011*, U.S. COPYRIGHT OFFICE, http://www.copyright.gov/1201/2011/initial/kellie_heistand.pdf.

183. 2012 Recommendation, *supra* note 64, at 160.

184. VON LOHMANN & HINZE, *supra* note 37, at 2–4.

185. See *supra* Section I.B.

186. VON LOHMANN & HINZE, *supra* note 37, at 3.

use should function in a digital era where technological protection measures are common.

2. *The Register Should Incorporate Reasonable Belief in Classes of Works*

A good way to solve this problem would be to include a narrowing provision that focuses on whether a user reasonably believes they are making noninfringing use. Register Peters, after gaining ten years of experience with the rulemaking process, did this in 2010 when she incorporated a user's state of mind as part of an exemption. Incorporating a reasonable belief test, with both objective and subjective components, would simplify the text of exemptions and make them more accessible to ordinary consumers, while allowing space for courts to handle difficult edge cases with which the Copyright Office has traditionally struggled.

In 2010, the Register took this approach by adding a reasonable belief element to the exemption for DVD circumvention.¹⁸⁷ The exemption allowed for circumvention of DVD protection when a user “believes and has reasonable grounds for believing” that circumvention is necessary for one of several uses.¹⁸⁸ In her explanation, the Register noted that she included the provision to have “some degree of assurance” that a user was not circumventing for infringement.¹⁸⁹ A user needed to both subjectively believe the circumvention was necessary for the noninfringing use and be objectively reasonable in that belief. This dual requirement is a sensible approach to circumvention and provide better clarity and narrowing for exemptions.

By using reasonable belief of noninfringement, the Copyright Office can narrow exemptions in a clearer way than it did in the last rulemaking, avoiding complicated language that makes exemptions harder for consumers to understand and rely on. For example, the 2012 exemption for ebook circumvention added the provision about copyright owners being remunerated to balance concerns by publishers, who expressed concern that the original proposal would allow circumvention even when there were available formats on the market that served the needs of the blind.¹⁹⁰ Put more simply, the objection was that users would circumvent when it was unnecessary. Instead of narrowing the exemption by specifics about the work being used, the Register could accomplish the same function by narrowing the scope of an exemption based on the user's assessment of their need, as

187. 2010 Recommendation, *supra* note 56, at 72.

188. *Id.*

189. *Id.* at 75.

190. 2012 Recommendation, *supra* note 64, at 19.

well as a test for the reasonableness of that assessment that could be adjudicated by a court.

Limiting exemptions by reasonable belief of noninfringement would help bring a judicial role to copyright law, avoiding difficult factual determinations that are not easily handled by the Copyright Office. As noted by commentators, the mandate to look at “noninfringing uses” forces the Copyright Office to make a binary determination involving a doctrine that is heavily fact-dependent.¹⁹¹ Instead of forcing the Copyright Office to make absolute decisions about situations that may but will not always implicate fair use, an objective standard allows the Office to craft exemptions that are limited to necessary uses, while shifting some of the analysis of necessity to the judicial branch, which is far better equipped to handle fact-specific questions of copyright law, particularly when fair use is involved. Fair use is a creation of the judiciary, and using reasonable belief of noninfringement allows the judiciary to continue to shape fair use in a digital, post-DMCA world. This approach would offer a pathway to make reasonable, considered fair uses of digital works while allowing both the Copyright Office and judiciary to shape the bounds of such uses.

The Copyright Office has often struggled with crafting an exemption that covers only the desirable noninfringing behavior. For example, in 2012 when the Register declined to extend the jailbreaking exemption to tablets, her main concern was that the term was difficult to define and could cover a wide range of devices with different uses and situations.¹⁹² The Register agreed with critics who claimed that the different devices that could possibly fall within that term would require their own analysis and exemption proceeding.¹⁹³ Another proposed exemption in that rulemaking, which would have allowed circumvention to enable closed captions for hearing-disabled individuals, was denied because it was too broadly defined and there was not enough evidence for the Register to analyze any “particularized” uses.¹⁹⁴ The proponents of the exemption had made broad suggestions of what the exemption would enable,¹⁹⁵ but the Register was unwilling to even reform the exemption to be narrower without a more specific description of the exact uses the exemption would enable.¹⁹⁶ In both cases, the Register was unwilling to recommend or even reshape exemptions because there was too much

191. Perzanowski, *supra* note 98, at 21.

192. 2012 Recommendation, *supra* note 64, at 78.

193. *Id.*

194. *Id.* at 149.

195. *Id.* at 148–49.

196. *Id.* at 149.

ambiguity about the particular types of uses that would require their own analyses. If that analysis could be done closer to the time of use by a court, rather than up to three years in advance, the exemptions could be recommended with confidence that only noninfringing uses would be protected under the statute.

Edge cases where noninfringement is uncertain can sink entire exemptions or require that they be modified to the point of inscrutability. If the Copyright Office instead uses a reasonable belief standard, the Office can shift that uncertainty to a forum better situated to fact-specific determinations than a Washington D.C. conference room trying to predict the future years in advance. Bringing reasonable belief into exemptions gives both the flexibility and simplicity to exemptions that would otherwise lack those qualities.

IV. CONCLUSION

When the DMCA was first passed into law, many questions remained about how the law would work in practice. In many ways, giving administrative responsibility to an office based in the legislative branch¹⁹⁷ was a regulatory experiment at the time it was proposed. Since that time, digital technology has rapidly evolved from what it was in the 1990s. With over fifteen years and four rounds of rulemaking experience to draw upon, the Copyright Office can adjust how the rulemaking process is run with confidence.

The suggested proposals significantly address criticisms of the rulemaking process while staying within the intent of Congress. Clarifying the burden of proof expected to renew an exemption will light a clear path for consumer advocates who want to preserve a recommendation but have difficulties in marshaling evidence. Proactively thinking about fair use will more directly account for the intent of the House Commerce Committee when drawing the line between noninfringing uses that merit an exemption and those that do not. Incorporating reasonable belief into exemptions will allow exemptions to be narrow without being unnecessarily complex while leaving room for the courts to shape fair use jurisprudence. Taken together, these changes would bring more clarity and efficiency into rulemaking

197. In his signing statement, President Clinton dismissed constitutionality concerns by claiming that the Copyright Office was an executive agency for constitutional purposes (despite being part of the Library of Congress). William J. Clinton, Statement on Signing the Digital Millennium Copyright Act, 2 PUB. PAPERS 345 (Oct. 28, 1998), *available at* <http://www.presidency.ucsb.edu/ws/?pid=55169>.

proceedings while respecting the scope of the authority that Congress granted to the Copyright Office.

Register Pallante has suggested a larger regulatory role for the Copyright Office, allowing it to take on more administrative responsibility within the copyright system.¹⁹⁸ By actively improving one of its major administrative roles, the Copyright Office will have powerful proof for Congress that the Office can handle increased responsibilities. All that remains is to act.

198. See Pallante, *supra* note 91, at 341–43.

***ASSOCIATED PRESS V. MELTWATER US HOLDINGS,
INC.: FAIR USE, A CHANGING NEWS INDUSTRY,
AND THE INFLUENCE OF
JUDICIAL DISCRETION AND CUSTOM***

Rosalind Jane Schonwald[†]

I'm very aware of how much we're hurting, Margaret. Staff reductions, dip in circulation. Each one of those faces of every subscriber we lose; they keep me awake at night. Now, I won't argue the business side of things. It's neither my place nor my area of expertise, but know this: Zoe Barnes, twitter, blogs, enriched media, they're all surface. They're fads. They're not the foundation this paper was built on, and they won't keep it alive. We have a core readership that thirsts for hard news. *Those* are the people I work 80 hours a week for. I won't be distracted by what's fashionable.¹

In *House of Cards*, these are the parting words of a seasoned newspaper editor and, though fictional, they ring true. Increasingly, digital media redirects readership and revenue from traditional print sources by competing for eyeballs and, as a result, advertising revenue. New market relationships accompany new media forms, and in the case of news aggregation, the relationship between content producers, advertising revenue, and the various means of hosting the information is still in flux. In the information age, with unprecedented interconnectivity, how and why should we fund information and its sources? How much should we privilege the preservation of hard news content over the fluidity of the new media environment or vice versa?

Customary arrangements present one way to determine the legality of aggregators' use of news excerpts. Since before Ghen's lance was found in a beached whale,² courts and theorists have grappled with how best to incorporate custom into the law, and today is no different. In 1992, Professor Richard Epstein observed that, although custom could establish industry norms, the courts were necessary to enforce them.

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1. *House of Cards: Season 1 Episode 5*, NETFLIX (Netflix Original Series Feb. 1, 2013).

2. See *Ghen v. Rich*, 8 F. 159, 160 (Mass. 1881) (deferring to local custom and awarding ownership of the blubber from a beached whale to the hunter who killed it).

[D]ecentralized customs may be generated without legal interference and control, but legal force may be necessary to maintain them against systematic defection. Indeed, the entire debate over whether some level of coercion is required first to form, and then to maintain, the state rests in part upon the common (dare one say customary) perception that purely private agreements will break down in the face of opportunistic behavior.³

According to Professor Epstein, government support and intervention is necessary to stem opportunistic behavior.⁴

However, what happens when a court is enforcing custom at the very moment that custom is emerging or in an industry that engages in preventive licensing to avoid litigation? The tenuous relationship between custom observation and creation is notably present in the realm of copyright. A number of scholars have highlighted a circularity problem at the intersection of customary licensing markets and the fair use factors.⁵ Licensing

3. Richard A. Epstein, *International News Service v. Associated Press: Custom and Law As Sources of Property Rights in News*, 78 VA. L. REV. 85, 127 (1992).

4. *Id.* at 127–28. Professor Epstein considers nominal governmental intervention a necessary element for successful private ordering:

In many instances, these customs were able to form only because the government had supplied industry with the essential protection against external aggression that it needed to survive and flourish. . . . [W]hat works as a protected mechanism within a limited sphere may not work as an unprotected one in an unbounded domain.

Id.

5. For a discussion as to how the relationship between fair use and licensing markets may be problematic, causing a contraction of fair use, see Jennifer E. Rothman, *The Questionable Use of Custom in Intellectual Property*, 93 VA. L. REV. 1899, 1911, 1931, 1935 (2007); James Gibson, *Risk Aversion and Rights Accretion in Intellectual Property Law*, 116 YALE L.J. 882, 884 (2007); Matthew Africa, Comment, *The Misuse of Licensing Evidence in Fair Use Analysis: New Technologies, New Markets, and the Courts*, 88 CALIF. L. REV. 1145, 1160–62, 1164 (2000); Lydia Pallas Loren, *Redefining the Market Failure Approach to Fair Use in an Era of Copyright Permission Systems*, 5 J. INTELL. PROP. L. 1, 38–41 (1997); Christina Bohannon, *Copyright Harm, Foreseeability, and Fair Use*, 85 WASH. U. L. REV. 969, 975, 977, 978 (2007). The fair use factors are:

- (1) the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes;
- (2) the nature of the copyrighted work;
- (3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and
- (4) the effect of the use upon the potential market for or value of the copyrighted work.

17 U.S.C. § 107 (2012).

agreements meant to avoid litigation in uncertain areas of law serve as *evidence* of an existing market, and the once-prophylactic licensing schemes become mandated by law.⁶ Jennifer Rothman identifies three components that make up the “circularity” issue in licensing and fair use: (1) there is a problematic creation of “clearance cultures” across the content industries in order to avoid litigation, (2) courts use the “clearance culture” to inform the nature of the use and market effect in a fair use analysis, and (3) courts, relying on licensing agreements to analyze market harm, fall into a “dangerous circularity,” in which licensing practices that were originally employed to mitigate litigation risk are codified into existing law.⁷

In the news industry, the combination of a struggling traditional print business and new aggregating technologies have made custom a hammer for the news content producers to shape the emerging aggregator licensing market via both hot news and fair use. For the past decade or so, traditional print newspapers and newswire services have attempted to recapture lost advertising dollars from news aggregators⁸ through the so-called “hot news” action, which provides news producers with a temporary right of exclusive publication of the content of news stories.⁹

Today, *Associated Press v. Meltwater U.S. Holdings, Inc.*, in a decision focusing on the eligibility of a news aggregator for the fair use defense, is a new variation on the news industry’s use of legal recourse, via copyright, to affect digital media licensing custom and practice.¹⁰ Meltwater U.S. Holdings, Inc. (“Meltwater”) is a “software as a service” company based in Norway that markets its keyword-based news-monitoring service to public relations professionals.¹¹ The company uses automated programs to scrape news articles, most often from the website of newsgathering organization Associated Press (“AP”), and then delivers the resulting headlines, so-called “ledes,”¹² and article excerpts, sometimes verbatim, to the customer’s e-mail

6. For a detailed account of the relationship between preventative licensing practices in the content industry and the contraction of fair use, see Rothman, *supra* note 5, at 1911, 1931, 1935; Gibson, *supra* note 5, at 884.

7. Rothman, *supra* note 5, at 1911, 1931, 1935.

8. See *infra* Section I.A.3 (discussing recent hot news and fair use actions brought against news aggregators and search engines as well as subsequent settlements); Section I.B.1 (detailing the resurgence of the hot news doctrine and its application in the news industry).

9. See *infra* Section I.B.1.

10. See *Associated Press v. Meltwater U.S. Holdings, Inc.*, 931 F. Supp. 2d 537, 543 (S.D.N.Y. 2013).

11. *Id.* at 543.

12. *Id.* at 541. A “lede,” the first line of an article, conveys the main idea of a news story.

inbox.¹³ Meltwater outcompeted AP software-as-a-service licensees for several mega-contracts.¹⁴ In other words, there was a preexisting, customary licensing market for the court to consider in its fair use analysis.

In a perhaps unexpected contraction of fair use,¹⁵ the Southern District of New York found that Meltwater's use of ledes, as well as its copying of article portions, violated Associated Press's copyright and did not qualify for the fair use defense.¹⁶ The parties subsequently settled the case, insulating the court's rejection of the fair use defense from appellate review and establishing a licensing relationship between the companies.¹⁷ The *Meltwater* case, in addition to defining the boundaries of the fair use doctrine in the context of novel information aggregation technology, provides a case study as content industries continually adopt new customary licensing schemes to maintain revenue streams within a changing media landscape. This Note argues that AP, in bringing the *Meltwater* action, may have been attempting enforcement, and even creation, of custom in order to maintain its income. After a resurgence of the "hot news" cause of action in recent years,¹⁸ AP's strategic litigation and licensing settlement, following a favorable fair use ruling, illustrates how news wire services are turning to copyright law to shape licensing custom in the Internet Age.

Part I of this Note traces the arc of the news industry before and after the digital revolution, as well as the relevant "hot news" and fair use issues affecting the news industry. This Part shows that competition for advertising poses the greatest challenge to traditional news companies, focusing on increasing attempts by AP and other content producers to maintain control of their content online. Part II introduces the facts and reasoning of the *Meltwater* decision. Part III analyzes the resulting decision in light of the judicial discretion that pervades fair use determinations, as well as the circularity problems posed by an emerging licensing market. Specifically, it discusses how courts lack consistency in their treatment of the fair use

13. *Id.* at 543.

14. *Id.* at 543.

15. See Meng Ding, Note, *Perfect 10, Inc. v. Amazon.com: A Step Toward Copyright's Tort Law Roots*, 23 BERKELEY TECH. L.J. 373, 378–79 (2008) (predicting that "[f]or the foreseeable future, the courts will most likely stick to the liberal reading of the four factors in deciding copyright fair use cases").

16. *Meltwater*, 931 F. Supp. 2d at 537–38.

17. See Joe Mullin, *AP Settles Copyright Suit With PR Firm After Winning Fair Use Ruling*, ARS TECHNICA (Jan. 24, 2014, 9:10 AM), <http://arstechnica.com/tech-policy/2013/07/ap-settles-lawsuit-with-pr-company-after-winning-key-fair-use-ruling/>.

18. See, e.g., *Barclays Capital, Inc. et al. v. TheFlyonthewall.com, Inc.*, 650 F.3d 876 (2d Cir. 2011); see also *Nat'l Basketball Ass'n v. Motorola, Inc.*, 105 F.3d 841 (2d Cir. 1997).

doctrine,¹⁹ a phenomenon often explained as an ex post facto technical analysis or as a predictable outcome in the context of “policy-relevant clustering,” a term coined by Professor Pamela Samuelson.²⁰ Regardless of the technical aspects of *Meltwater’s* fair use analysis, the relationship between customary licensing markets and fair use casts a pall on the finding that the fair use defense was unavailable to Meltwater. As a case of first impression in a still-forming market, we may be leaving important technology issues to an antiquated system plagued by doctrinal feedback, whereas thoughtful policy decisions would be a far better fit.

I. BACKGROUND

A. NEWSPAPER INDUSTRY

The news industry, faced with declining advertising revenue from its traditional print form, has struggled to find alternative sources of revenue. This Section provides an overview of recent trends in advertising in the traditional print news industry, as well as several possible future developments. The licensing settlement between AP and Meltwater provides one possible solution: licensing revenue from aggregators could be a means by which the news industry attempts to regain lost advertising income.

1. Past and Present

The news industry is in a state of flux, and advertisers and aggregators, in various ways, play a central role. The decline in journalism’s profitability cannot be wholly attributed to the rise of online competition for readership; it was already suffering before the mid-1990s, with media companies underperforming the Standard and Poor’s 500 starting in the mid-1980s.²¹ However, the recent decline in advertising revenue is a direct result of the relationship between digital media and increased competition for advertisers’ dollars. Declining advertising dollars for traditional printed periodicals have given rise to a business model in which subscription revenue accounts for

19. See *infra* Sections III.A.1, III.A.2.

20. See, e.g., David Nimmer, “*Fairest of Them All*” and Other Fairy Tales of Fair Use, LAW & CONTEMP. PROBS., Winter/Spring 2003 at 263, 280 (arguing that the fair use factors are used as an ex post facto justification, rather than as a test to determine outcome); Pamela Samuelson, *Unbundling Fair Uses*, 77 FORDHAM L. REV. 2537, 2541 (2009) (characterizing fair use outcomes as predictable and consistent by categorizing them according to policy concerns).

21. See Bruce C. Greenwald et al., *The Moguls’ New Clothes*, THE ATLANTIC (Oct. 2009), available at <http://www.theatlantic.com/doc/200910/moguls>.

nearly half of profits.²² From 1960 to 1994, daily print newspaper circulation hovered around sixty million, declining to forty million in 2011.²³ Advertising revenue has long been in decline, and gains in 2012 of 3.7 percent in online advertising, which now accounts for fifteen percent of total advertising revenue, is insufficient to change that trajectory.²⁴ The rate at which print advertising revenue is declining is greater than the rate at which digital newspaper advertising revenue is increasing.²⁵ This is partly because the high volume of digital advertising opportunities on such platforms as Facebook and Twitter lowers the prices advertisers are willing to pay.²⁶

22. See Pew Project for Excellence in Journalism, *Overview*, THE STATE OF THE NEWS MEDIA 2013: AN ANNUAL REPORT ON AMERICAN JOURNALISM, <http://stateofthemedias.org/2013/overview-5/> [hereinafter *State of the News Media, Overview*]. Pew details the decline in newspapers both in terms of the cutbacks and redirected advertising revenue:

Estimates for newspaper newsroom cutbacks in 2012 put the industry down 30% since 2000 and below 40,000 full-time professional employee for the first time since 1978. . . . Over all, mobile advertising grew 80% in 2012 to \$2.6 billion. Of that, however, only one ad segment is available to news: display. While mobile display is growing rapidly, 72% of that market goes to just six companies—including Facebook, which didn't even create its first mobile ad product until mid-2012. . . . Thanks in good part to its two-year-old digital subscription program, The New York Times reports that its circulation revenue now exceeds its advertising revenue, a sea change from the traditional revenue split of as much as 80% advertising dollars to 20% circulation dollars. Going forward, many news executives believe that a new business model will emerge in which the mix between advertising and circulation revenue will be close to equal, most likely with a third leg of new revenues that are not tied directly to the news product.

Id.

23. See *Newspaper Circulation Volume*, NEWSPAPER ASS'N OF AMERICA (Sept. 4, 2012), <http://www.naa.org/Trends-and-Numbers/Circulation-Volume/Newspaper-Circulation-Volume.aspx>.

24. See Rick Edmonds et al., Pew Project for Excellence in Journalism, *Newspapers: By the Numbers*, THE STATE OF THE NEWS MEDIA 2013: AN ANNUAL REPORT ON AMERICAN JOURNALISM, <http://stateofthemedias.org/2013/newspapers-stabilizing-but-still-threatened/newspapers-by-the-numbers/> [hereinafter *Newspapers: By the Numbers*] (showing that total advertising revenue declined from \$46,155 in 2003 to \$22,314 in 2012).

25. See *id.* (“Print advertising losses continue to far exceed digital ad gains. For 2012, the ratio was about 15 print dollars lost for every digital dollar gained—even worse than the 10 to 1 ratio in 2011.”).

26. See Rick Edmonds et al., Pew Project for Excellence in Journalism, *Newspapers: Stabilizing, But Still Threatened*, THE STATE OF THE NEWS MEDIA 2013: AN ANNUAL REPORT ON AMERICAN JOURNALISM, <http://stateofthemedias.org/2013/newspapers-stabilizing-but-still-threatened/> [hereinafter *Newspapers: Stabilizing but Still Threatened*].

The decline in advertising revenue is important because journalism has never subsisted on subscription fees alone; historically, the newspaper industry relied heavily on various forms of subsidies, whereas in recent decades, ads accounted for approximately eighty percent of profits.²⁷ The postal service, which enabled the distribution of newspapers, developed under Benjamin Franklin with significant government subsidy.²⁸ These early government subsidies for newspapers included the president's designation of an "official" Washington newspaper, which awarded lucrative government printing contracts; similar designation and subsidies from the House and Senate; and funding from political parties.²⁹ Towards the end of the nineteenth century, the rise of advertising, as well as increasing demand for newspapers, ended the period of subsidization and marked the beginning of a period of commercialization.³⁰ In fact, the average number of daily newspapers in medium or large U.S. cities peaked in 1910 before falling below Civil War numbers by approximately one third by 1930 and continuing to decline until the present.³¹ In some countries, however, such subsidization continues: if the United States were to replicate the per capita rates of Sweden and Norway, today's subsidies would be \$2 billion and \$4 billion, respectively.³² Although this sort of subsidization could threaten the existence of an independent press, the private ownership of newspapers also presents similar issues of financial relationships influencing reporting.

The rise in digital advertising revenue does not compensate for the overall losses papers have incurred for one reason: the money is going elsewhere. The competition for digital advertising revenue takes place in the interstices of news aggregators, licensed and otherwise, with Google as the lead player in the field.³³ The negative impact of free online classified services

27. See Jon Leibowitz, Chairman and Comm'r of the Fed. Trade Comm., Opening Remarks at the Federal Trade Commission News Media Workshop: "Creative Destruction" or Just "Destruction" How Will Journalism Survive the Internet Age? (Dec. 1, 2009), available at <http://www.ftc.gov/speeches/leibowitz/091201newsmedia.pdf>.

28. See ROBERT MCCHESENEY & JOHN NICHOLS, *THE DEATH AND LIFE OF AMERICAN JOURNALISM* 127–28 (2011).

29. See *id.*

30. See *id.* at 133.

31. See *id.* at 272. This data measured papers in U.S. cities ranked three through twelve for population size. The average number of papers per city was as follows: twelve in 1910, about 7.5 in 1930, and a bit more than 1.5 in 2008.

32. See *id.* at 167.

33. See Jane Sasseen et al., Pew Project for Excellence in Journalism, *Digital: As Mobile Grows Rapidly, the Pressures on News Intensify*, *THE STATE OF THE NEWS MEDIA 2013: AN*

such as Craigslist on advertising revenue is separable from that of other types of newspaper advertising, and both are significant.³⁴ From 2003 to 2012, overall news outlet advertising revenue declined from \$46.2 billion to \$22.3 billion, while the portion resulting from online advertising revenue actually rose from \$1.2 billion to \$3.4 billion.³⁵ Interestingly, the current lists of print and digital newspapers with the highest numbers of subscribers are similar; three entities are among the top five in both categories.³⁶ In both cases, however, print circulation still dwarfs unique digital subscriptions.³⁷ To compare, as of September 2012, the number of *The Wall Street Journal* and *The New York Times* users with solely digital subscriptions were 794,593 and 883,263, respectively, while their total circulations are 2,293,798 and 1,613,865, respectively.³⁸

2. *The Future of Newspapers?*

There is no widespread consensus regarding the future profitability of traditional print media or the changes the industry should embrace. One strategy employed by *The New York Times* was shifting to a paywall,³⁹ which reduces online traffic and therefore advertising revenue.⁴⁰ Pew Research Center considers the shift to paid content desirable and the most promising strategy for supporting the news industry in the future.⁴¹ With the backdrop of declining circulation, papers have turned to various means of

ANNUAL REPORT ON AMERICAN JOURNALISM, <http://stateofthemediamedia.org/2013/digital-as-mobile-grows-rapidly-the-pressures-on-news-intensify/>.

34. See *Newspapers: By the Numbers*, *supra* note 24 (noting that from 2003 to 2012, total print revenue from classified advertisements dropped from over \$15 billion to less than \$5 billion, while national advertising fell from approximately \$7 billion to less than \$5 billion, and retail advertising declined from over \$20 billion to slightly over \$10 billion).

35. See *id.*

36. See *id.* As of September 2012, the top five newspapers with paid digital subscriptions were *The New York Times*, *The Wall Street Journal*, *The New York Post*, *Denver Post*, and *The Los Angeles Times*, in that order. The top five daily print papers is a similar list: *The Wall Street Journal*, *USA Today*, *The New York Times*, *The Los Angeles Times*, and the *New York Daily News*.

37. Unique digital subscriptions are tabulated separately from the digital subscriptions automatically granted to home-delivery subscribers. See *id.*

38. These figures are notable given that *The New York Times* only started offering digital subscriptions in 2011. See *id.*

39. A “paywall” functions by providing website access to subscribers, while limiting or blocking access for other users. See Ryan Chittum, *The NYT’s \$150 million-a-year paywall*, COLUMBIA JOURNALISM REVIEW (Aug. 1, 2013), available at http://www.cjr.org/the_audit/the_nyts_150_million-a-year_pa.php.

40. See *id.*

41. See *Newspapers: Stabilizing but Still Threatened*, *supra* note 26.

monetization: paywalls, partial paywalls (permission of “casual traffic” rather than a complete paywall), and offering free digital access to print subscribers.⁴² As newspapers expand to mobile readers, advertising revenue has proven anemic or nonexistent, possibly because advertisers prefer to place targeted advertisements on social media websites and search engines, rather than alongside news stories.⁴³

Another recent trend is entrepreneurs’ investing in traditional print journalism. In 2012, Berkshire Hathaway acquired Media General, Inc.’s newspapers, Warren Buffet’s hometown papers, and several others,⁴⁴ totaling twenty-five in circulation, for \$142 million.⁴⁵ In 2013, Jeff Bezos of Amazon.com, Inc. bought *The Washington Post*, and Chris Hughes of Facebook, Inc. bought *The New Republic*.⁴⁶ Ebay, Inc. founder Pierre M. Omidyar, after backing multiple organizations relating to news and governmental transparency, will be collaborating with Glenn Greenwald to create “a large, general-interest news site with a focus on investigative and government accountability reporting.”⁴⁷ Omidyar expressed doubt that news on its own could ever be profitable.⁴⁸

Predictably, those concerned with preservation of the traditional newspaper industry include journalists themselves.⁴⁹ President Obama has voiced alarm about the direction of the news industry:

42. *See id.*

43. *See id.*

44. *See* Jennifer Saba & Ben Berkowitz, *Warren Buffett to buy Media General Newspapers*, REUTERS, May 17, 2012, available at <http://www.reuters.com/article/2012/05/17/us-mediageneral-idUSBRE84G0M920120517>.

45. *See id.*

46. *See* Renee Montagne & Steve Inskeep, *eBay Founder Explains His Venture Into Journalism*, NPR (Oct. 21, 2013, 4:00 AM), <http://www.npr.org/templates/story/story.php?storyId=240428476>.

47. *See* David Carr, *An Interview with Pierre Omidyar*, N.Y. TIMES, Oct. 20, 2013, <http://www.nytimes.com/2013/10/21/business/media/an-interview-with-pierre-omidyar.html>.

48. When asked whether the news industry could ever be profitable, Omidyar explained:

I think on its own, probably not. . . . The audience for the most important stories can be depressingly small. There will always be a core of readers willing to support that work, but it is a tiny, tiny percentage of broader society. That’s part of the reason we are doing a general-interest site, to work on how we get a general-interest audience to become engaged citizens.

Id.

49. *See* MCCHESENEY & NICHOLS, *supra* note 28, at xv; *see also* BRUCE A. WILLIAMS & MICHAEL X. DELLI CARPINI, *AFTER BROADCAST NEWS: MEDIA REGIMES, DEMOCRACY*,

I am concerned that if the direction of the news is all blogosphere, all opinions, with no serious fact-checking, no serious attempts to put stories in context, that what you will end up getting is people shouting at each other across the void but not a lot of mutual understanding.⁵⁰

Even Seventh Circuit Judge Richard Posner has dedicated multiple blog posts to the topic.⁵¹ Proponents of traditional news media emphasize a link between journalism and democracy-enabling public discourse.⁵² Suggestions for reviving the industry include government subsidies,⁵³ or, more amorphyously, novel media platforms incorporating traditional journalistic standards.⁵⁴ Some advocates favor “democratization” of news through aggregation and similar search-enabling uses, possibly through a lax “hot news” or broad fair use application. Organizations favoring such policies include Electronic Frontier Foundation (“EFF”) and digital media companies that rely on aggregation and advertising, such as Google.⁵⁵

AND THE NEW INFORMATION ENVIRONMENT 1–15 (2011); PAGE ONE: INSIDE THE NEW YORK TIMES AND THE FUTURE OF JOURNALISM ix–xvi (David Folkenflik ed., 2011); JACK FULLER, WHAT IS HAPPENING TO NEWS: THE INFORMATION EXPLOSION AND THE CRISIS IN JOURNALISM ix–12 (2010); NEIL HENRY, AMERICAN CARNIVAL: JOURNALISM UNDER SIEGE IN AN AGE OF NEW MEDIA 1–18 (2007).

50. Michael O’Brien, *Obama Open to Newspaper Bailout*, THE HILL (Sept. 20, 2009, 8:24 PM), <http://thehill.com/blogs/blog-briefing-room/news/59523-obama-open-to-newspaper-bailout-bill>.

51. See Richard Posner, *The Future of Newspapers*, THE BECKER-POSNER BLOG (June 23, 2009, 7:37 PM), <http://www.becker-posner-blog.com/2009/06/the-future-of-newspapers-posner.html>; Richard Posner, *Are Newspapers Doomed?*, THE BECKER-POSNER BLOG (June 29, 2008, 2:07 PM), <http://www.becker-posner-blog.com/2008/06/are-newspapers-doomed-posner.html>.

52. See MCCHESENEY & NICHOLS, *supra* note 28, at ix.

53. See *id.* at 157–212.

54. See WILLIAMS & DELLI CARPINI, *supra* note 49, at 324–26.

55. See, e.g., Brief for Electronic Frontier Foundation and Public Knowledge as Amici Curiae Supporting of Defendant’s Opposition to Motion for Summary Judgment at 2, 6, 8, 13, *Associated Press v. Meltwater U.S. Holdings, Inc.*, 931 F. Supp. 2d 537 (S.D.N.Y. 2013) (No. 2:12-cv-1087-DLC-FM) (arguing against an expressiveness requirement for transformative use and recommending that the court give strong weight to public interest). EFF expressed concern that a finding of infringement for a news aggregator could render inventors liable, “undermine legal protections for personal non-expressive copying,” as well as “undermine the sharing of news snippets by private citizens.” *Id.* at 9; see also Google, *Comments on Federal Trade Commission’s News Media Workshop and Staff Discussion Draft on “Potential Policy Recommendations to Support the Reinvention of Journalism”*, FED. TRADE COMM’N: MEDIA WORKSHOP, at 20 (July 20, 2010) available at http://www.ftc.gov/sites/default/files/documents/public_comments/2010/07/544505-05218-55014.pdf (recommending ways in which content producers should collaborate with Google and other aggregators and search engines as a means of extracting novel revenue).

3. *Newspapers Take a Direct Approach To Shaping Licensing Markets*

The combination of legal settlements resulting in licensing schemes and concerted efforts by AP to track and litigate unlicensed uses of articles suggests that traditional media is taking an active role in shaping the emerging aggregator licensing market.

In 2005, Agencies France-Press (“AFP”) filed suit against Google News for displaying AFP’s headlines and photographs its search results.⁵⁶ In 2007, the parties settled, establishing a licensing agreement that permitted Google to index the articles in Google News, presumably for a fee.⁵⁷ Shortly thereafter, Samuel Zell, then the owner of the *Chicago Tribune*, announced he wanted similar licensing fees from Google.⁵⁸ In October 2007, after sending a cease-and-desist letter, AP sued news aggregator Moreover Technologies for copyright infringement.⁵⁹ Moreover’s services included providing links to customers, like British Broadcasting Corporation (“BBC”) that they could publish alongside relevant articles, maintaining a Google News-like database and hosting unlicensed AP articles on sites alongside advertisements.⁶⁰ The case settled on undisclosed terms.⁶¹ Although the terms of the settlement were confidential, Moreover’s continued news services suggest that the parties reached a licensing agreement.⁶²

There are clear signs that AP is increasing monitoring and enforcement against non-licensing entities that use their content. In 2010, it rolled out the

56. See Eric Goldman, *Initial Assessment of AFP v. Google*, TECH. & MKTG. L. BLOG (Mar. 21, 2005), http://blog.ericgoldman.org/archives/2005/03/initial_assessm_1.htm.

57. See Eric Goldman, *AFP v. Google Settles*, TECH. & MKTG. L. BLOG (Apr. 7, 2007), http://blog.ericgoldman.org/archives/2007/04/afp_v_google_se.htm. At the time, Google was already paying AP licensing fees.

58. See Frank Ahrens & Karl Vick, *Zell Wants End to Web’s Free Ride*, POST BUSINESS (Apr. 7, 2007), http://www.washingtonpost.com/wp-dyn/content/article/2007/04/06/AR2007040601967.html?nav=rss_technology.

59. Thomas Wilburn, *AP Sues U.S. News Aggregator for Copyright Infringement and Trademark Abuse*, ARS TECHNICA (Oct. 10, 2007, 8:48 PM), <http://arstechnica.com/uncategorized/2007/10/associated-press-sues-news-aggregator-for-licensing-failure/>.

60. See *id.*

61. See Mark Hefflinger, *Associated Press Settles Lawsuit Against Moreover, VeriSign*, DIGITAL MEDIA WIRE (Aug. 18, 2008, 12:16 PM), <http://www.dmwmedia.com/news/2008/08/18/associated-press-settles-lawsuit-against-moreover-verisign>.

62. See MOREOVER TECHNOLOGIES, <http://www.moreover.com/> (last accessed Mar. 17, 2014).

News Registry, a system for tagging and tracking news.⁶³ In 2011, AP launched the News Licensing Group, which absorbed the News Registry's tracking role and served as a central hub for content licensing, modeled after the American Society of Composers, Authors, and Publishers.⁶⁴ The News Licensing Group, renamed NewsRight, LLC, became an independent company in 2012.⁶⁵ The startup, which did not own the copyright to any of the content it protected and tracked, served as a licensing clearinghouse and provided information to publishers wishing to bring suit.⁶⁶

In an interesting twist, in May 2013, NewsRight "joined forces" with Moreover Technologies (the former subject of an AP lawsuit) and BurrellesLuce, another monitoring service, to offer news monitoring, licensing, and distribution, while the Newspaper Association of America absorbed NewsRight's policing role.⁶⁷ NewsRight's dissolution occurred after failing to retain more than five customers, including Moreover, and perhaps reflects a slight change in strategy by the twenty-nine newspapers that partnered to form NewsRight.⁶⁸

B. LEGAL BACKGROUND

It is not a new phenomenon for members of the news content industry to turn to the "hot news" doctrine as well as copyright for protection from misappropriation and infringement, respectively. However, these doctrines have new relevance in an era of news aggregation. Reliance on copyright, particularly as it relates to ledes, is only a recent and ongoing development.

63. See Russell Adams, *AP To Launch News Licensing Group*, DIGITS: TECH NEWS & ANALYSIS FROM THE WSJ (Feb. 3, 2011, 4:48 PM), <http://blogs.wsj.com/digits/2011/02/03/ap-to-launch-news-licensing-group/>.

64. See *id.*

65. See Staci D. Kramer, *NewsRight Launches with 29 Publishers; 'Not A Litigation Shop,'* PAIDCONTENT (Jan. 5, 2012, 9:00 PM EST), <http://paidcontent.org/2012/01/05/419-newsright-launches-with-29-publishers-not-a-litigation-shop/>.

66. See *id.* Analysts speculate that aggregation services and sites such as Meltwater and Huffington Post spurred NewsRight's formation. See *id.*

67. See *NewsRight Joins Forces with Moreover Technologies/BurrellesLuce to Expand Content Licensing and Tracking Service*, BUS. WIRE (May 2, 2013, 12:00 PM EST), <http://www.businesswire.com/news/home/20130502006103/en/NewsRight-Joins-Forces-Technologies-BurrellesLuce-Expand-Content>.

68. See Ken Doctor, *The Newsnomics of Where NewsRight Went Wrong*, NIEMAN JOURNALISM LAB (May 15, 2013, 8:20 AM), <http://www.niemanlab.org/2013/05/the-news-nomics-of-where-newsright-went-wrong/>.

1. *Hot News: a Narrow Cause of Action*

News aggregators are prime targets for so-called “hot news” claims. In its current form, the hot news doctrine grants news agencies temporary protection from misappropriation of the content of their news stories. The focus on content of the stories, rather than the wording, distinguishes hot news from copyright.⁶⁹ The claim’s narrowness results from a combination of the end of federal common law, copyright preemption, and a narrowed application in the Second Circuit.

The hot news doctrine originated in 1918 in *International News Service v. Associated Press*, in which the Supreme Court held that news content, despite being outside the realm of copyright, merited protection as “quasi property,” thus granting a temporary property right and prohibiting misappropriation by a direct competitor.⁷⁰ Two decades later, *Erie Railroad Co. v. Tompkins* marked the end of federal common law, but the hot news doctrine has survived in various iterations, rendering hot news a state law tort claim.⁷¹ Today, hot news survives as a state law claim in multiple circuits.⁷²

However, as a state law claim, hot news is limited by federal preemption; in areas where it overlaps with the 1976 Copyright Act, federal copyright law must supersede.⁷³ Copyright law grants protection to a creative work fixed in a tangible medium of expression: it does not protect ideas or facts,⁷⁴ despite the effort expended in acquiring them.⁷⁵ In *Feist Publications, Inc. v. Rural Telephone Service Co.*, the Supreme Court rejected the sweat-of-the-brow justification for copyright protection and permitted free copying of unprotected aspects of a work.⁷⁶ The case concerned one telephone director’s copying of telephone listings from a competitor; the Court held that the

69. See ROBERT P. MERGES, PETER S. MENELL & MARK A. LEMLEY, *INTELLECTUAL PROPERTY IN THE NEW TECHNOLOGICAL AGE* 1016–17 (6th ed. 2012).

70. See *Int’l News Serv. v. Associated Press*, 248 U.S. 215, 236 (1918).

71. See *Erie R. Co. v. Tompkins*, 304 U.S. 64 (1938); MERGES, MENELL & LEMLEY, *supra* note 69, at 1016.

72. See MERGES, MENELL & LEMLEY, *supra* note 69, at 1016 (citing *U.S. Golf Ass’n v. St. Andrews Sys.*, 749 F.2d 1028 (3rd Cir. 1984); *IMAX Corp. v. Cinema Techs., Inc.*, 152 F.3d 1161 (9th Cir. 1998); *Ettore v. Philco Television Broad. Corp.*, 229 F.2d 481 (3d Cir. 1956), *cert. denied*, 351 U.S. 926 (1956)).

73. See MERGES, MENELL & LEMLEY, *supra* note 69, at 1017.

74. See *Harper & Row, Publishers, Inc. v. Nation Enters.*, 471 U.S. 539, 547 (1985).

75. See *Hoehling v. Universal City Studios, Inc.*, 618 F.2d 972, 974 (2d Cir. 1980), *cert. denied*, 449 U.S. 841 (1980).

76. 499 U.S. 340, 359–60 (1991).

listings were unprotectable because they “lack[ed] the requisite originality.”⁷⁷ Subject to the holding in *International News Service v. Associated Press*, the Court permitted that “raw facts may be copied at will.”⁷⁸

The hot news cause of action had a recent rejuvenation in the Second Circuit, as well as, some argue, a subsequent limitation. In *National Basketball Association v. Motorola, Inc.*, a case concerning the unauthorized dissemination of real-time information about basketball games,⁷⁹ the Second Circuit outlined five requirements a plaintiff must meet to prevail on a hot news claim, ensuring that the cause of action is substantially different from copyright infringement. The requirements are:

- (i) [A] plaintiff generates or gathers information at a cost; (ii) the information is time-sensitive; (iii) a defendant’s use of the information constitutes free riding on the plaintiff’s efforts; (iv) the defendant is in direct competition with a product or service offered by the plaintiffs; and (v) the ability of other parties to free-ride on the efforts of the plaintiff or others would so reduce the incentive to produce the product that its existence or quality would be substantially threatened.⁸⁰

Barclays Capital, Inc. v. TheFlyonthewall.com, Inc. further limited the hot news doctrine. The court held that the doctrine did not apply to republication of Barclays brokers’ investment recommendations by a news service called TheFly.⁸¹ The court’s rationale for excluding such alleged misappropriation from the hot news doctrine was that the Copyright Act preempted the claim. Barclays failed to allege a hot news claim because at issue was misattribution of journalistic information, rather than misappropriation. The information was *created* by Barclays, not journalistically researched;⁸² the brokers receiving TheFly’s news, and not TheFly, were diverting profits from Barclays;⁸³ and the information and opinions were being *ascribed* to Barclays brokers, rather than claimed as a result of TheFly’s own research.⁸⁴ After *Barclays*, subsequent

77. *Id.* at 364.

78. *Id.* at 353–54, 350.

79. 105 F.3d 841, 843 (2d Cir. 1997).

80. *Id.* at 845.

81. 650 F.3d 876, 878 (2d Cir. 2011).

82. *Id.* at 903 (“In pressing a ‘hot news’ claim against Fly, the Firms seek only to protect their Recommendations, something they *create* using their expertise and experience rather than *acquire* through efforts akin to reporting.”).

83. *Id.* at 903.

84. *Id.* at 904.

analyses have noted the doctrine's uncertainty, as well as its potential to help the ailing news industry.⁸⁵

2. *The Origins of Fair Use*

In the case of news aggregators, copyright, as well as the fair use defense, are particularly important because of the automated nature of aggregation; usually an aggregator is hosting actual excerpts, not simply the informational content that hot news protects. As a result, the scope of fair use—how large of an excerpt an aggregator may permissibly use—could have important ramifications for the development and monetization of aggregators as well as news.

Before the 1976 Copyright Act, fair use was “an exclusively judge-made doctrine,”⁸⁶ based on prior case law and judicial discretion, as judges sought to balance the interests of the public with those of creators.⁸⁷ In a seminal decision recognizing fair use more than 150 years ago, Justice Story stated that courts, in assessing whether the use of a copyrighted work is fair, “must often . . . look to the nature and objects of the selections made, the quantity and value of the materials used, and the degree in which the use may prejudice the sale, or diminish the profits, or supersede the objects of the original work.”⁸⁸ Courts evolved and adapted this standard for over a century before Congress codified the doctrine in the Copyright Act of 1976:

Notwithstanding the provisions of sections 106 and 106A, the fair use of a copyrighted work, including such use by reproduction in copies or phonorecords or by any other means specified by that section, for purposes such as criticism, comment, news reporting, teaching (including multiple copies for classroom use), scholarship, or research, is not an infringement of copyright. In determining

85. See Rayiner Hashem, Note, *Barclays v. Thefly: Protecting Online News Aggregators From the Hot News Doctrine*, 10 NW. J. TECH. & INTELL. PROP. 37 (2011); Shyamkrishna Balganes, *The Uncertain Future of “Hot News” Misappropriation After Barclays Capital v. Theflyonthewall.com*, 112 COLUM. L. REV. SIDEBAR 134 (2012); Brian Westley, Comment, *How a Narrow Application of ‘Hot News’ Misappropriation Can Help Save Journalism*, 60 AM. U. L. REV. 691, 692 (2011); Joseph A. Tomain, *First Amendment, Fourth Estate, and Hot News: Misappropriation is Not a Solution to the Journalism Crisis*, 2012 MICH. ST. L. REV. 769, 770 (2012); Amy E. Jensen, Comment, *When News Doesn’t Want to Be Free: Rethinking “Hot News” to Help Counter Free Riding on Newspaper Content Online*, 60 EMORY L.J. 537, 539 (2010).

86. See *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 576 (1994).

87. The constitution enables intellectual property “[t]o promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.” U.S. CONST., art. I, § 8, cl. 8.

88. *Folsom v. Marsh*, 9 F. Cas. 342 (C.C.D. Mass. 1841) (No. 4901).

whether the use made of a work in any particular case is a fair use the factors to be considered shall include—

- (1) the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes;
- (2) the nature of the copyrighted work;
- (3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and
- (4) the effect of the use upon the potential market for or value of the copyrighted work.⁸⁹

There is debate about the purpose, function, and internal consistency of fair use, which this Note will address in Section III.A. Congress intended that fair use continue to evolve according to judicial interpretation and that § 107 only serve as a guide.⁹⁰ Accordingly, the four statutory factors are meant to be “illustrative and not limitative.”⁹¹ Some scholars, such as Pierre Leval, a judge on the Second Circuit, take the opposite tact, arguing that a court should only consider the four factors.⁹²

3. *Fair Use of Newspaper Clipping and Search Engine Excerpts*

News aggregators seemingly sit at the crux of fair use law as it applies to newspaper clippings and search engines. Although courts have found a search engine’s use of thumbnails to constitute a fair use,⁹³ newspaper clipping services are not permitted under fair use.⁹⁴ Similar to newspaper

89. 17 U.S.C. § 107 (2012).

90. H.R. REP. NO. 94-1476, at 66 (1976); S. REP. NO. 94-473, at 62 (1975).

91. *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 577 (1994); *see also* 17 U.S. § 101 (2012).

92. *See* Pierre N. Leval, *Toward a Fair Use Standard*, 103 HARV. L. REV. 1105, 1125 (1990). Leval stated, “[t]he more I have studied the question, the more I have come to conclude that the pertinent factors are those named in the statute. Additional considerations that I and others have looked to are false factors that divert the inquiry from the goals of copyright.” *Id.*

93. *See Kelly v. Arriba Soft Corp.*, 336 F.3d 811, 818 (9th Cir. 2002) (finding a search engine’s use of thumbnails for an index function constituted transformative use); *Perfect 10, Inc. v. Amazon.com, Inc.*, 508 F.3d 1146, 1155 (9th Cir. 2007) (finding Google’s use of thumbnails to show image search results was a fair use, despite supplanting a legitimate licensing market).

94. *See Video Pipeline, Inc. v. Buena Vista Home Entm’t, Inc.*, 342 F.3d 191, 199 (3d Cir. 2003) (holding that a compiler of video clips for commercial use on the Internet did not qualify as a fair use); *Nihon Keizai Shimbun, Inc. v. Comline Bus. Data, Inc.*, 166 F.3d 65, 72 (2d Cir. 1999) (finding that the sale of abstracts of articles consisting of similar structure,

clipping services, news aggregation consists of exact copying of headlines, and sometimes ledes, as well as the bodies of news articles. However, like search engines, aggregators' copying operates via scraping⁹⁵ and could promote the public interest enabling access to information.

Meltwater is not the first news aggregator case involving ledes to reach the trial stage, although it is one of few, if any, to receive a verdict before settling. *GateHouse Media v. New York Times Co.* involved the website of a local Massachusetts newspaper.⁹⁶ GateHouse alleged infringement based on the defendant's "reproducing, displaying and distributing on the Infringing Website unauthorized verbatim copies of newspaper article headlines and the first sentences thereof (the 'ledes'), as first published by the plaintiff."⁹⁷ This settlement, rather than resulting in a licensing deal, consisted of an agreement that the plaintiff's website would set up technical barriers to prevent scraping *and* that the defendant website would honor those barriers.⁹⁸

chronology, and content was not a fair use); *Infinity Broad. Corp. v. Kirkwood*, 150 F.3d 104, 108 (2d Cir. 1998) (finding that Wayne Kirkwood, appearing pro se, could not sell a radio-monitoring service under the fair use defense); *L.A. News Serv. v. Tullo*, 973 F.2d 791, 797, 799 (9th Cir. 1992) (finding that a service selling clips of television news broadcasts did not qualify for the fair use defense); *Pac. & S. Co., Inc. v. Duncan*, 744 F.2d 1490, 1496 (11th Cir. 1984) (finding that a service selling tapes of news broadcasts to the subjects of those broadcasts did not qualify as fair use).

95. See Marc S. Friedman & William T. Zanolowitz, *The Invasion of the "Screen Scrapers"*, 6 NO. 5 E-COMMERCE L. REP. 4 (May 2004). The authors define a "screen scraper" as:

[A] computer software program that accesses (or, figuratively, "scrapes") information from a website server. The data is collected in HTML source code form (not graphically) and is then stored on the "screen scraper's" host server. These "screen scraper" programs go by many different names—"robot," "spider crawler," "scraper," "spider" and "bot" are just some examples. A "screen scraper" functions like a web browser, except that the "screen scraper" is incredibly fast, with the ability to visit millions of web pages per second. Because of the speed, a "screen scraper" can retrieve several pages on a server simultaneously, and that consumption can burden the resources of the website, potentially depriving legitimate users of the ability to visit the site. A "screen scraper" can also automatically access target websites thousands of times per day.

Id.

96. No. 1:08-cv-12114 (D. Mass. Dec. 22, 2008), available at <http://dmlp.org/sites/citmedialaw.org/files/2009-01-26-Settlement%20Order%20of%20Dismissal.pdf>.

97. Complaint at 2, *GateHouse Media v. N.Y. Times Co.*, No. 1:08-cv-12114 (D. Mass. Dec. 22, 2008) available at <http://www.dmlp.org/sites/citmedialaw.org/files/2008-12-22-Gatehouse%20Media%20Complaint.pdf>.

98. See Robert Weisman, *NYT, Gatehouse Release Settlement Details*, BOSTON.COM (Jan. 26, 2009 11:56 AM), http://www.boston.com/business/ticker/2009/01/nyt_gatehouse_r.html.

There is also a growing body of law that permits certain types of copying by search engines. Two Ninth Circuit cases lead and illuminate these laws. In *Kelly v. Arriba Soft Corp.*, the Ninth Circuit found “that [search engine operator] Arriba’s use of [photographer] Kelly’s images for its thumbnails was transformative.”⁹⁹ Although the thumbnails were not literally transformative, they “served an entirely different function than Kelly’s original images.”¹⁰⁰ The exact copying to form a thumbnail image was necessary for the search engine’s indexing function,¹⁰¹ and, rather than supplanting the market for Kelly’s work, Arriba’s use enabled potential customers to locate and identify that work.¹⁰² The court noted the lack of any licensing market for Kelly’s images, bolstering its conclusion.¹⁰³

In *Perfect 10, Inc. v. Amazon.com, Inc.*, the Ninth Circuit held that Google’s use of thumbnail images to show image search results constituted a fair use, despite possibly supplanting a legitimate licensing market and despite the fact that the thumbnails helped generate advertising revenue for the search engine.¹⁰⁴ The court considered an “exact copy of a work” to be transformative, “so long as the copy serves a different function than the original work.”¹⁰⁵ Google passed this test, it held, because “a search engine transforms the image into a pointer directing a user to a source of information.”¹⁰⁶ In weighing the various fair use factors, the Ninth Circuit found that the transformative use of the thumbnail images, paired with the public interest in accessing information, outweighed Google’s commercial interest in displaying the results.¹⁰⁷

II. THE MELTWATER CASE

On March 21, 2013, Judge Denise Cote of the Southern District of New York issued an opinion finding that Meltwater, a news aggregation service, could not use the fair use defense to justify duplication and distribution of headlines, ledes, and excerpts from AP news articles.¹⁰⁸ The *Meltwater* court’s

99. 336 F.3d 811, 818 (9th Cir. 2003).

100. *Id.*

101. *See id.* at 821.

102. *See id.*

103. *Id.* at 821–22.

104. 508 F.3d 1146, 1161–62 (9th Cir. 2007).

105. *Id.* at 1165.

106. *Id.*

107. *See id.* at 1166.

108. *Associated Press v. Meltwater U.S. Holdings, Inc.*, 931 F. Supp. 2d 537, 540 (S.D.N.Y. Mar. 21, 2013).

decision focused on the fair use defense despite multiple causes of action brought in AP's complaint.¹⁰⁹ The court's holding differentiated Meltwater's services from those of a search engine, a fair use,¹¹⁰ which could mark an expansion of the recourse available for news wire services. The following Sections will outline the facts of the case and the reasoning behind the court's decision, and they will then suggest some lines of reasoning by which a court could have found that Meltwater's use qualified for the fair use defense.

A. THE FACTS OF THE CASE

AP's news clipping service has significant breadth in the news industry, with ownership spanning 1,400 individual newspapers, a staff of about 3,700, and production of over one thousand articles each day.¹¹¹ Relevant to the balancing of fair use factors, licensing fees account for "a principal component of AP's revenue."¹¹² One of AP's services is AP Exchange, which permits licensees to perform keyword searches of AP articles, receive updates on keyword searches via e-mail, and provide a similar service to licensees' own customers.¹¹³

Meltwater, based in Norway, is a multinational "software as a service" company founded in 2001; it earned \$124.5 million in revenue in 2012.¹¹⁴ Since 2005, Meltwater has offered Meltwater News in the United States,¹¹⁵ consisting of a news monitoring service based on the use of keywords. It uses "automated computer programs or algorithms to copy or 'scrape' an

109. *Id.* at 548. The multiple causes of action brought were:

(1) [C]opyright infringement; (2) contributory copyright infringement; (3) vicarious copyright infringement; (4) declaratory judgment of copyright infringement; (5) "hot news" misappropriation under New York common law; and (6) removal or alteration of copyright management information. In response, Meltwater has raised four counterclaims: (1) declaratory judgment of non-infringement; (2) declaratory judgment of safe harbor from infringement claims based upon the Digital Millennium Copyright Act ("DMCA"); (3) libel per se; and (4) tortious interference with business relations.

Id. Beyond fair use, the defenses mounted and summarily rejected were "implied license, equitable estoppel, laches, and copyright misuse." *Id.*

110. *Id.* at 553.

111. *Id.* at 541.

112. *Id.*

113. *Id.* at 542.

114. *Id.* at 543; see *Meltwater Group Company Profile*, INC., <http://www.inc.com/profile/meltwater-group> (last accessed Jan. 27, 2014).

115. *Meltwater*, 931 F.Supp.2d at 543.

article from an online news source, index the article, and deliver verbatim excerpts of the article.”¹¹⁶ The service is primarily marketed to public relations professionals as a means of tracking press coverage.¹¹⁷

Meltwater’s services are indelibly tied to use of AP articles, making the case critical to its business model and vice versa. Judge Cote identified Meltwater as a competitor to “AP and its licensees,” emphasizing that Meltwater had won a “mega-contract” that otherwise would have gone to an AP licensee.¹¹⁸ Meltwater customers access news stories via “News Reports” (reports created in response to search queries and accessed via e-mail updates or the website), “Analytics” (charts and graphs describing coverage of the search term), “Ad Hoc Searches” (searches performed by the user in real time), or a “Newsletter” (personalized newsletters created from a search query).¹¹⁹ For the sake of the case, thirty-three “Registered Articles” were used to track infringing activity.¹²⁰ Of the thirty-three registered articles in the case, “Meltwater was able to calculate from its records that it made at least 22,297 excerpts from the twenty-four Registered Articles available to its customers in the United States in response to agent queries.”¹²¹

B. THE COURT’S REASONING

Of the four fair use factors, Judge Cote determined that the first, third, and fourth factors—the purpose and character of the use, the amount and substantiality of the portion used, and the potential effect on the market or value of the work, respectively—favored a finding against fair use. Because the second factor was neutral, Judge Cote weighed it as though it favored fair use. The private nature of Meltwater’s service and the presence of licensing

116. *Id.* at 545.

117. *Meltwater News, Product Overview*, MELTWATER, <http://www.meltwater.com/products/meltwater-news> (last visited Jan. 27, 2014).

118. *See Meltwater*, 931 F. Supp. 2d at 544.

119. *Id.* at 544–46.

120. *Id.*

121. *Id.* at 546. There have been previous lawsuits against the news service. In the United Kingdom, the Newspaper Licensing Agency brought an action alleging copyright infringement, in which, interestingly, “the Court of Appeal found that headlines were copyrightable because they were works that were original and literary.” *See* Alexander Weaver, Comment, *Aggravated with Aggregators: Can International Copyright Law Help Save the Newsroom?*, 26 EMORY INT’L L. REV. 1161, 1178 (2012). In addition, Meltwater has various cases pending abroad, and the implications of these lawsuits are unclear. *See* Ali Sternburg, *AP-Meltwater Settlement Dims Prospects for European Ruling on Internet Browsing*, DISCO: DISRUPTIVE COMPETITION PROJECT (July 30, 2013), <http://www.project-disco.org/intellectual-property/073013-ap-meltwater-settlement-dims-prospects-for-european-ruling-on-internet-browsing/>.

agreements between AP and similar parties played a significant role in Judge Cote's reasoning. At later steps in the analysis, she found the use of ledes and excerpts did not constitute a "transformative use," and the weighing of the public interest favored protection of AP's rights.¹²²

1. *Purpose and Character of the Use*

The court's analysis of the "purpose and character of the use" turned on whether the use was transformative or especially favorable to the public interest.¹²³ The opinion quickly dismissed physical changes to the works and emphasized the limitations of transformative use, citing authority that a "change of format, though useful," is not transformative.¹²⁴ The opinion also found the public interest to weigh against Meltwater because interference with AP's profits harmed its "ability to perform this essential function of democracy."¹²⁵ Judge Cote compared the importance of Meltwater's search function with the public benefit of news-reporting agencies, emphasizing that the holding would not harm internet search engines "in any way," whereas she considered Meltwater's unlicensed use a serious risk to AP's revenue.¹²⁶

The court also differentiated *Perfect 10* and *Arriba* from *Meltwater* on the basis that the prior cases involved the use of a "search engine engaging in transformative purpose," "publicly available" search results, and indivisible images.¹²⁷ Meltwater, in contrast, provides "the online equivalent of a traditional news clipping service," the production of which is not transformative.¹²⁸

2. *Nature of the Copyrighted Work*

The court addressed the issue of the nature of the copyrighted work relatively quickly. The court found that although the work was nonfiction, which weighed in favor of a finding of fair use, the fact that the work was published weighed against fair use.¹²⁹ In sum, this factor favored a fair use finding.¹³⁰

122. *Meltwater*, 931 F. Supp. 2d at 551.

123. *See id.* at 552–53.

124. *Id.* at 551 (citing *Infinity Broad. Corp. v. Kirkwood*, 150 F.3d 104, 109–10 (2d Cir. 1998)).

125. *Id.* at 553.

126. *Id.*

127. *Id.* at 555–56.

128. *Id.* at 556.

129. *Id.* at 557.

130. *Id.*

3. *Amount and Substantiality of the Portion Used*

The court engaged in both a qualitative and a quantitative analysis when considering the third fair use factor and found that both types of analysis favored a finding of infringement.¹³¹ The proportion of copied articles was relatively high, and the court considered the “lede” to be an especially important, creative aspect of a news article:

Meltwater took between 4.5% and 61% of the Registered Articles. It automatically took the lede from every AP story. As described by AP’s Standards Editor, the lede is “meant to convey the heart of the story.” A lede is a sentence that takes significant journalistic skill to craft. There is no other single sentence from an AP story that is as consistently important from article to article—neither the final sentence nor any sentence that begins any succeeding paragraph in the story.¹³²

The variance of the proportion copied results from the length of the articles copied; there was no variance in the lengths of the excerpts themselves. Judge Cote’s emphasis on the lede essentially pushed aside the issue of proportion copied.

4. *Potential Effect on the Market or Value of the Work*

The potential effect on the market or value of the work was particularly damaging to Meltwater’s case. The court noted that an existing licensing market weighs strongly against fair use.¹³³ In particular, “[w]hen analyzing the fourth factor, ‘the impact on potential licensing revenues is a proper subject for consideration.’”¹³⁴ In applying the facts to *Meltwater*, the court found that the market impact was significant because of direct competition between Meltwater and AP licensees. Consequently, Meltwater “obtained an unfair commercial advantage in the marketplace and directly harmed the creator of expressive content,” undermining copyright’s constitutional purpose.¹³⁵

131. *Id.*

132. *Id.* at 558. If only headlines or ledes were copied, there would be an interesting question of whether infringement had occurred in this case. However, because the *Meltwater* case also involved copying of possibly significant proportions of the articles, the decision did not address the copyrightability of ledes alone.

133. *Id.* at 559 (citing *Harper & Row Publishers, Inc. v. Nation Enters.*, 471 U.S. 539 (1985)).

134. *Id.* at 560 (quoting *Am. Geophysical Union v. Texaco Inc.*, 60 F.3d 913, 929 (2d Cir. 1994)).

135. *Id.* at 561.

C. AN ALTERNATIVE TO THE *MELTWATER* RESULT

Given the lack of direct precedent pertaining specifically to news aggregation, it is conceivable that *Meltwater* could have had a result favoring news aggregators. This Section proposes that a judge interpreting fair use more broadly in the context of aggregation technology could have in fact found that the first, third, and fourth factors favored fair use.¹³⁶

1. *Transformative Nature of the Use—Where the Public Interest Lies*

An argument for the arbitrariness of the *Meltwater* decision might focus on the idea that the use was not necessarily less transformative than *Perfect 10* or *Kelly*; in fact, the public might benefit from the provision of *Meltwater*'s services. In *Perfect 10*, the Ninth Circuit, citing *Sony Corp. v. Universal City Studios, Inc.*, concluded “that the significantly transformative nature of Google’s search engine, particularly in light of its public benefit, outweighs Google’s superseding and commercial uses of the thumbnails in this case. In reaching this conclusion, we note the importance of analyzing fair use flexibly in light of new circumstances.”¹³⁷

However, Judge Cote may have taken an opposite tact more in line with the Ninth Circuit cases. It is perhaps telling that Judge Cote, despite differentiating *Meltwater* from a search engine, does not give a precise definition of a search engine anywhere in the opinion.¹³⁸ Her bases for differentiating *Meltwater* from a search engine are (1) that *Meltwater* may have scraped more content than is necessary for it to function as a search engine¹³⁹ and (2) that *Meltwater*'s status as an “information-location tool” was insufficient to qualify as a search engine.¹⁴⁰ These two requirements taken

136. It is interesting to note that Judge Denise Cote had previously ruled against the fair use defense for a newspaper-clipping analogue in *Nihon Keizai Shimbun, Inc. v. Comline Bus. Data, Inc.*, perhaps reflecting a preference for a narrow fair use defense. See *Nihon Keizai Shimbun, Inc. v. Comline Bus. Data, Inc.*, No. 98 CIV. 641 (DLC), 1998 WL 274285, at *1 (S.D.N.Y. May 27, 1998), *aff'd*, 166 F.3d 65 (2d Cir. 1999).

137. *Perfect 10, Inc. v. Amazon.com, Inc.*, 508 F.3d 1146, 1165 (citing *Sony Corp. v. Universal City Studios, Inc.*, 464 U.S. 417, 431–32 (1984) (quoting H.R. REP. No. 94-1476, at 65–66 (1976)) (“[Section 107] endorses the purpose and general scope of the judicial doctrine of fair use, but there is no disposition to freeze the doctrine in the statute, especially during a period of rapid technological change.”)).

138. See *Meltwater*, 931 F. Supp. 2d at 551.

139. See *id.* at 555–56.

140. See *id.* at 541.

together could mean that Judge Cote's opinion limits a search engine to a *specialized* search engine.¹⁴¹

One could analogize Meltwater's excerpts to the thumbnails in *Arriba* and *Perfect 10* due to the purpose they serve and the way a public relations professional would use them: as indices rather than articles. In *Arriba*, the thumbnails, although not literally transformative, served an entirely different function.¹⁴² The thumbnails were necessary for the search engine's indexing function¹⁴³ and enabled potential customers to locate the work.¹⁴⁴ In *Perfect 10*, an exact copy was still transformative so long as it served "a different function," such as a "pointer directing a user to a source of information," despite possibly supplanting a licensing market.¹⁴⁵ Judge Cote's opinion emphasizes that a "change of format, though useful" is not transformative.¹⁴⁶ Perusing Meltwater's news excerpts, however, reveals that each snippet constitutes more than a change in format—it is more akin to a data point than a news article.¹⁴⁷ This snippet serves the purpose of providing information by pointing to where the relevant term appeared. The full tone and context of the article are not apparent from the excerpt alone, and therefore a court might easily find that the snippet is transformative.¹⁴⁸

2. *Quantity of Copying and the Relative Importance of Ledes*

A reinterpretation of the importance of an excerpt's proportion and the qualitative significance of ledes could also make the third fair use factor cut in favor of Meltwater. In the *Meltwater* opinion, Judge Cote emphasized that the quantity of the portion copied and the qualitative importance of the lede made the third fair use factor cut against fair use.¹⁴⁹ The proportion of the articles excerpted for these ledes, however, varied considerably, ranging from

141. *See id.* at 541, 555–56.

142. *See Kelly v. Arriba Soft Corp.*, 336 F.3d 811 (9th Cir. 2003).

143. *See id.* at 821.

144. *See id.* at 821–22.

145. *Perfect 10, Inc. v. Amazon.com, Inc.*, 508 F.3d 1146, 1161–62, 1165 (9th Cir. 2007).

146. *Associated Press v. Meltwater U.S. Holdings, Inc.*, 931 F. Supp. 2d 537, 551 (S.D.N.Y. Mar. 21, 2013) (citing *Infinity Broad. Corp. v. Kirkwood*, 150 F.3d 104, 109–10 (2d Cir. 1998)).

147. *See Online Media Monitoring*, MELTWATER, <http://www.meltwater.com/products/meltwater-news/online-media-monitoring/> (last accessed Feb. 8, 2014) (providing an image of Meltwater's search results, including examples of excerpts).

148. *See id.*

149. *Meltwater*, 931 F. Supp. 2d at 557.

4.5 to sixty-one percent.¹⁵⁰ Each excerpt consisted of a uniform quantity of characters, and it only varied because, in some cases, the excerpted articles were extremely short.¹⁵¹ Judge Cote, by imbuing the lede with creative importance above other parts of the article, rendered the computer-generated snippets presented in Meltwater's search function more important than they would otherwise be.¹⁵²

3. *Legitimacy of the Existing Licensing Markets? Who Should Pay for News?*

If the existing licensing markets between AP and businesses competing with Meltwater were deemed illegitimate, then the fourth factor would not favor a finding of fair use. However, because a licensing market is also automatically deemed legitimate, there is little room for a court to decide that a licensed activity qualifies for the fair use defense. As a result, in content industries, the culture of risk-avoidant licensing creates an automatic contraction of fair use, particularly paired with the fourth fair use factor.¹⁵³ The *Meltwater* opinion treated a low click-through rate as evidence that the article excerpt replaced the act of reading it and that the Meltwater excerpt supplanted the market for the original article.¹⁵⁴ This analysis presumes that, absent the Meltwater service, users would have sought out the article directly, and that the existing licensing market is legitimate.

The Supreme Court, in *Harper & Row Publishers, Inc. v. Nation Enterprises*, designated the fourth factor, the potential effect on the market or value of the work, as the most important,¹⁵⁵ which makes sense because market interference undermines copyright's constitutional purpose to incentivize creation.¹⁵⁶ There is support for the proposition that the fourth factor continues to be the most prominent in the determination of fair use decisions,¹⁵⁷ which proves problematic when paired with the litigation-avoiding "clearance cultures" that emerge in content industries.¹⁵⁸

150. *See id.* at 558.

151. *Compare id.* (showing the range of proportions of articles copied), *with Products: Online Media Monitoring*, MELTWATER, <http://www.meltwater.com/products/meltwater-news/online-media-monitoring/> (last visited Feb. 8, 2014) (demonstrating the uniform nature of the article excerpts).

152. *See Meltwater*, 931 F. Supp. 2d at 558.

153. *See infra* Section III.B.

154. *Meltwater*, 931 F. Supp. 2d at 557.

155. *Harper & Row Publishers, Inc. v. Nation Enters.*, 471 U.S. 539, 566 (1985).

156. *See Leval*, *supra* note 92, at 1124.

157. *See Harper & Row*, 471 U.S. at 566–67; *Princeton Univ. Press v. Mich. Document Servs., Inc.*, 99 F.3d 1381, 1385 (6th Cir. 1996); *Triangle Publications, Inc. v. Knight-Ridder*

III. THE EX POST FACTO NATURE OF FAIR USE AND THE CIRCULARITY OF CUSTOMARY LICENSING REGIMES CAST DOUBT ON THE *MELTWATER* RESULT

This Part details some debates regarding the predictability of the fair use defense and the risk of circularity when customary licensing markets inform fair use determinations.¹⁵⁹ There is considerable scholarship decrying the unpredictability of fair use determinations, characterizing them as ex post facto analyses rather than true weighing of objective factors.¹⁶⁰ On the other hand, Professor Pamela Samuelson, among others, views fair use as a series of policy-relevant clusters, in which court determinations become predictable based on the industry or subject matter.¹⁶¹ Scholarship concerning the circularity of preexisting licensing markets, most notably that of Jennifer Rothman and James Gibson, paints a worrisome picture of litigation-phobic content industries, the courts, and the fair use defense working together to create and then enforce licensing markets.¹⁶² Although the *Meltwater* decision becomes predictable when viewed in terms of Pamela Samuelson's relevant public policy cluster—Internet search engines—the circularity problem persists. Therefore, even if the decision is doctrinally correct, it accompanies the potential for powerful industries to strong-arm licensing markets into existence.

A. JUDICIAL DISCRETION AND THE MYTH OF A MECHANICAL FAIR USE

There is a significant amount of scholarship arguing that fair use decisions are inconsistent because courts use the factors as ex post facto justifications rather than as guidance decisions.¹⁶³ This Section will discuss the perspectives of Judge Pierre N. Leval and David Nimmer, who favor an arbitrary characterization of the fair use factors, as well as Professor Pamela

Newspapers, Inc., 626 F.2d 1171, 1175 (5th Cir. 1980); Barton Beebe, *An Empirical Study of U.S. Copyright Fair Use Opinions, 1978-2005*, 156 U. PA. L. REV. 549 (2008).

158. See *infra* Section III.B.

159. See *infra* Section III.B. The risk posed by such circularity is that fair use will shrink, and the realm of works requiring a copyright licensing will increase, without any oversight in the process.

160. See *infra* Section III.A.

161. See *infra* Section III.B.

162. See *infra* Section III.C.

163. See, e.g., Leval *supra* note 92, at 1106; Nimmer, *supra* note 20, at 280; LAWRENCE LESSIG, *FREE CULTURE: HOW BIG MEDIA USES TECHNOLOGY AND THE LAW TO LOCK DOWN CULTURE AND CONTROL CREATIVITY* 187 (2004); Michael W. Carroll, *Fixing Fair Use*, 85 N.C. L. REV. 1087, 1090 (2007); NEIL WEINSTOCK NETANEL, *COPYRIGHT'S PARADOX* 66 (2008).

Samuelson's identification of rhyme and reason in fair use decisions when a case is viewed in terms of the relevant policy cluster. Given that several of the fair use factors in *Melwater* could weigh for *or* against fair use, it would not be outlandish to characterize the decision as *ex post facto*. On the other hand, the result makes sense in light of Professor Samuelson's suggested factors for the Internet indexing tool or news copying policy cluster.

1. *Ex Post Facto Fair Use*

In the decade or so after the Copyright Act codified the fair use defense, Judge Pierre N. Leval took note of the staggering importance of judicial discretion and the practical irrelevance of the enumerated fair use factors¹⁶⁴ and lamented the absence of "a set of governing principles or values."¹⁶⁵ In contrast, in the public discourse courts had "treated the definition of the doctrine as assumed common ground."¹⁶⁶ Judge Leval argued that court rulings, rather than being governed by "consistent principles," are the product of "intuitive reactions to individual fact patterns" and are justified by "notions of fairness, often more responsive to the concerns of private property than to the objectives of copyright."¹⁶⁷ The factors are a guide, he argued, encouraging a breadth of factors to consider, rather than a "score card."¹⁶⁸

David Nimmer, echoing Judge Leval's perspective, attempted a systematic study of fair uses decisions since 1994 to bolster the point.¹⁶⁹ Based on his research, Nimmer concluded that the correlation between each factor favoring fair use and a fair use outcome was the following: fifty-five percent for the first factor, forty-two percent for the second, fifty-seven percent for the third, fifty percent for the fourth, and nearly fifty-one percent of all the factors favored fair use.¹⁷⁰ He summarized:

Beyond elevating the first and third factors slightly, while denigrating the second, the numbers hardly tell a compelling story.

164. See Leval, *supra* note 92, at 1105–07.

165. *Id.* at 1105–06.

166. See *id.* at 1106.

167. *Id.* at 1107.

168. See *id.* at 1110.

169. Nimmer, *supra* note 20, at 278–89, 280–82. However, Nimmer acknowledges that his methodology was qualitative rather than quantitative, given the nature of judges' characterizations of their own decisions. The factor analysis is based on Nimmer's perception of the factors, rather than the courts', which yields a correspondence of approximately ninety percent, in his estimation.

170. *Id.* at 280.

The last figure is the most revealing. Basically, had Congress legislated a dartboard rather than the particular four fair use factors embodied in the Copyright Act, it appears that the upshot would be the same.¹⁷¹

Nimmer painted judges' treatment of the fair use factors as an ex post facto justification for decisions already made, and he explained that "the four factors fail to drive the analysis, but rather serve as convenient pegs on which to hang antecedent conclusions."¹⁷²

To support his contention that fair use decisions are often arbitrary, Nimmer cites cases in which the relationship between the factors and the outcome of the case are vexing.¹⁷³ The cases include *Financial Information v. Moody's*, in which an appeals court found the opposite of the district court on every fair use factor;¹⁷⁴ *Harper & Row v. Nation Enterprises*, when six Supreme Court justices found that all factors favored fair use, and three justices found that all factors disfavored fair use;¹⁷⁵ and *Robinson v. Random House, Inc.*, in which all factors favored fair use, and yet the court found that the defense did not apply.¹⁷⁶ Conversely, with regard to *Kelly v. Arriba*, Nimmer concluded that all factors disfavored fair use, whereas the district court and Ninth Circuit found that the use was, in fact, fair.¹⁷⁷

In *Meltwater*, although Judge Cote found factors one, three, and four to disfavor fair use, it is plausible to analyze the factors in such a manner as to weigh in favor of a fair use finding.¹⁷⁸ Revisiting *Meltwater* with Nimmer and Leval's perspectives in mind, the decision seems arbitrary. However, the following Section will analyze a possible explanation for this seeming arbitrariness: policy relevant clustering among fair use decisions.

171. *Id.*

172. *Id.* at 281.

173. *See id.*

174. *See id.* (citing *Fin. Info., Inc. v. Moody's Investors Serv., Inc.*, 751 F.2d 501 (2d Cir. 1984)).

175. *See id.* at 282 (citing *Harper & Row, Publishers, Inc. v. Nation Enters.*, 471 U.S. 539 (1985)).

176. *See id.* (citing *Robinson v. Random House, Inc.*, 877 F. Supp. 830 (S.D.N.Y. 1995)).

177. *See id.* at 283 (citing *Kelly v. Arriba* 280 F.3d 934 (9th Cir. 2002), *withdrawn*, *Kelly v. Arriba*, 77 F. Supp. 2d. 1116, 1120–21 (C.D. Cal. 1999)).

178. *See supra* Section II.C.

2. *Fair Use Policy Clusters As a Plausible Explanation for Meltwater*

Some scholars argue that fair use decisions form a pattern of “policy-relevant clusters,”¹⁷⁹ a view under which the *Meltwater* result makes more sense, despite fair use factors that could have supported the opposite outcome.¹⁸⁰ Professor Pamela Samuelson finds that courts, rather than “‘stampede’ to conclusions in favor of or against fair use,” reach predictable conclusions in light of the applicable policy cluster.¹⁸¹ For Professor Samuelson, fair use successfully “promote[s] competition, technological innovation, and greater public access to information and ability to make use of content”; it is not merely an ex post facto analysis to support a foregone conclusion.¹⁸²

Fair use allows copyright to adapt to “unforeseen uses” resulting from technological innovation.¹⁸³ The purpose of the internet search engine policy cluster includes “promoting competition and innovation in complementary technology industries, furthering privacy and autonomy of users of copyrighted works, and fostering enhanced public access to information.”¹⁸⁴ In particular, *Meltwater* would likely fall under either (1) Professor Samuelson’s cluster concerning “internet search engine copying for the purpose of indexing or otherwise making information about protected works more publicly accessible”¹⁸⁵ or (2) her news-related policy cluster. Under the news-related cluster, the fair use defense usually fails “because judges believed the defendants took too much, interfered with core licensing markets, or engaged in wrongful conduct that tainted the fair use defense.”¹⁸⁶

179. See Samuelson, *supra* note 20, at 2541; see also ALAN LATMAN, FAIR USE OF COPYRIGHTED WORKS, STUDY NO. 14, COPYRIGHT LAW REVISION, STUDIES PREPARED FOR THE SUBCOMM. ON PATENTS, TRADEMARKS, AND COPYRIGHTS, S. COMM. ON THE JUDICIARY, 86TH CONG. 3, 8–14 (Comm. Print 1960), available at <http://www.copyright.gov/history/studies/study14.pdf>; Michael J. Madison, *A Pattern-Oriented Approach to Fair Use*, 45 WM. & MARY L. REV. 1525, 1645–65 (2004); Paul Goldstein, *Fair Use in Context*, 31 COLUM. J.L. & ARTS 433, 439–41 (2008).

180. See *supra* Section II.C.

181. Samuelson, *supra* note 20, at 2542.

182. *Id.* at 2546.

183. See *id.* at 2602.

184. See *id.*

185. *Id.* at 2610.

186. See *id.* at 2619; see also ALAN LATMAN, FAIR USE OF COPYRIGHTED WORKS, STUDY NO. 14, COPYRIGHT LAW REVISION, STUDIES PREPARED FOR THE SUBCOMM. ON PATENTS, TRADEMARKS, AND COPYRIGHTS, S. COMM. ON THE JUDICIARY, 86TH CONG. 3, 8–14 (Comm. Print 1960).

For the internet search engine cluster, Professor Samuelson established a multifactor analysis:

Among the factors highly relevant in information access cases are: (1) whether the putative fair user is, in fact, facilitating better access to publicly available copyrighted works; (2) whether the information-access tool is making searches more efficient and effective; (3) whether copying is necessary or reasonable in order to facilitate better access; (4) whether transaction costs for seeking and obtaining permission are such that a market cannot readily be formed; and (5) whether the information-access tool made by the defendant is superseding or supplanting the market for the plaintiff's work.¹⁸⁷

Under this rubric, no judge could have found fair use in *Meltwater*. Under factor one, the service was clearly private, and the works were not publicly available; *Meltwater* users had to subscribe for the content.¹⁸⁸ Although the second factor is less glaringly in opposition to a finding of fair use, it is at best neutral; there is no evidence that *Meltwater* was providing a more efficient search. Factor three may slightly favor the fair use finding, but only marginally. Copying is not necessary to facilitate better access due to the presence of many similar search services, and reasonableness is quite subjective. Factor four clearly disfavors fair use under this rubric due to the presence of a preexisting licensing market, as does factor five for the same reason. Although these factors may eliminate the problem of predictability, there is still the problem of circularity.

B. CUSTOM AND FAIR USE IN THE NEWS INDUSTRY

Despite the soundness of the *Meltwater* decision in light of policy-relevant clustering, the issue of circularity in custom and licensing in fair use presents another potential issue for *Meltwater* and future aggregator cases. Discussion about the relationship between licensing and fair use determinations goes back nearly a century.¹⁸⁹ More recently, Professor Jennifer Rothman and a contingent of other scholars have observed that custom, when used to

187. Samuelson, *supra* note 20, at 2614.

188. *See* Associated Press v. Meltwater U.S. Holdings, Inc., 931 F. Supp. 2d 537, 544–46 (S.D.N.Y. Mar. 21, 2013).

189. *See* Gibson, *supra* note 5, at 897 (citing RICHARD C. DE WOLF, AN OUTLINE OF COPYRIGHT LAW 143 (1925); ARTHUR W. WEIL, AMERICAN COPYRIGHT LAW 429 (1917); Saul Cohen, *Fair Use in the Law of Copyright*, 6 COPYRIGHT L. SYMP. (ASCAP) 43, 51–52 (1955); Elizabeth Filcher Miller, Note, *Copyrights—“Fair Use,”* 15 S. CAL. L. REV. 249, 250 (1942)).

inform a fair use analysis, creates a “circularity” problem.¹⁹⁰ The “clearance culture” employed in many content industries to avoid litigation becomes incorporated into law, and as a result, prophylactic and legally required licensing regimes become one and the same.¹⁹¹

This Section first outlines the debate concerning custom and law in general, as well as in the particular context of licensing and fair use. In the early 1990s, Professors Richard Epstein and Stephen L. Carter debated the use of custom to inform rights in misappropriation cases. Epstein’s and Carter’s concerns about custom supporting or undermining content industry frameworks, depending on the application, also extended to fair use. Epstein viewed custom as an efficient means by which courts can determine misappropriation, whereas Carter expressed concern about judges’ limited perspective.¹⁹² The debate continues in the particular realm of fair use, including a disagreement between Professors Epstein and Rothman, among others, about the risks of circularity when considering licensing customs in fair use cases.¹⁹³

1. *Desirability of Applying Custom to the Law*

Professor Richard Epstein supports the enforcement of private customary regimes by courts.¹⁹⁴ He advocates for court-enforced private ordering as a means of ensuring that misappropriation is properly applied.¹⁹⁵ Epstein concludes that courts should bow to custom in cases where parties’ involvement is “repeat and reciprocal” because “their incentives to reach the correct rule are exceedingly powerful.”¹⁹⁶ In situations where there is a weaker custom, Epstein asks for “some explicit cost/benefit calculation.”¹⁹⁷ In his 1992 article, he argued that strong customs informed the decision in *INS v. AP*.¹⁹⁸ Because the parties were in direct competition, the value of news as a commodity depended on “their exclusive ability to get it to their respective markets as quickly as possible.”¹⁹⁹ The very strength of the custom in *International News Service v. Associated Press* explains why misappropriation of

190. Rothman, *supra* note 5, at 1911, 1931, 1935.

191. *See supra* note 5 and accompanying text.

192. *Infra* Section III.B.1.

193. *Infra* Section III.B.2.

194. *See generally* Epstein, *supra* note 3.

195. *See generally id.*

196. *Id.* at 126.

197. *Id.*

198. *See id.*

199. *See id.* at 91.

“rivals’ bulletin boards or early editions” were not more widespread.²⁰⁰ Epstein warns of mutually assured destruction when a court does not enforce news industry custom.²⁰¹

Professor Stephen L. Carter advised caution in applying Professor Epstein’s theory, citing a custom’s possible inherent problems, judges’ limited perspectives, and the “public goods problem.”²⁰² An inherently problematic custom could involve negative externalities, which the involved parties should absorb, or restrictive licenses enabling anti-competitive behavior by firms.²⁰³ A judge’s ability to discern a custom could be limited by their unfamiliarity with an issue or industry as well as the plausibility that parties are not fully truthful.²⁰⁴ In the realm of intellectual property, Carter warns that the “public goods problem” makes cooperation more difficult to enforce, resulting in weaker industry customs and making it “[un]surpris[ing] when the courts upset local rules governing *intellectual* property.”²⁰⁵ Simply put, in Carter’s view, industry custom is weaker and less relevant in the realm of intellectual property.

2. *The Circularity Problem*

In 1999, Professor Jennifer E. Rothman observed that the relationship between custom and intellectual property, rather than being non-existent, as Professor Carter had suggested, was problematic as well as ubiquitous,

200. *See id.* at 97; *see generally* *Int’l News Serv. v. Associated Press*, 248 U.S. 215 (1918).

201. *See* Epstein, *supra* note 3, at 96 (quoting *Nat’l Telegraph News Co. v. W. Union Tel. Co.*, 119 F. 294, 295–96 (7th Cir. 1902)). Additionally, in *National Tel. News Co.*, the court prohibited:

[C]opying from the appellee’s electrical instruments and printing machines, known as tickers, for the purpose of publishing, selling or transmitting through their own tickers, or otherwise disposing of, or using, any of the news or information . . . until the lapse of fully sixty minutes from the time such news items are printed

Nat’l Tel. News, 119 F. at 296.

202. Stephen L. Carter, *Custom, Adjudication, and Petrushevsky’s Watch: Some Notes from the Intellectual Property Front*, 78 VA. L. REV. 129, 131, 132, 138 (1992). Carter’s article summarizes the public goods problem:

When the next user can appropriate the fruit of intellectual development at a cost close to zero and without interfering with the prior user’s enjoyment, it is not easy to see what suasion the prior user can bring to bear, in the absence of regulation, to make the next user stop.

Id.

203. *See* Carter, *supra* note 202, at 131, 132, 138.

204. *See id.* at 132.

205. *Id.* at 138.

especially in the fair use context. Rothman's key observations were: (1) there was a problematic creation of "clearance cultures" across the content industries in order to avoid litigation, (2) courts used the "clearance culture" to inform the type of use and market affect in a fair use analysis, and (3) courts, relying on licensing agreements to analyze market harm, fell into a "dangerous circularity," in which licensing practices that were originally meant to avoid litigation risk were codified into existing law.²⁰⁶ In a 2006 article, James Gibson elaborated on the circularity problem, attributing a gradual expansion of copyright to "the interaction of indeterminate doctrine and risk-averse licensing" in light of high damages when infringement is found.²⁰⁷ The gray areas stem from "the idea/expression dichotomy, the substantial similarity test, and the fair use defense," which all consist of standards, rather than bright-line rules.²⁰⁸ In turn, these licensing practices create a precedent relevant to fair use's consideration of licensing markets, turning once-gray areas into the domains of licensors and licensee in a recursive process that increases the domain protected by copyright.²⁰⁹ Gibson terms this process "doctrinal feedback."²¹⁰

The second and fourth fair use factors are particularly vulnerable to the circularity problem. A "commercial use" is likely to result in a finding that the character of the use is not fair.²¹¹ In a similar vein, market harm is deemed likely when the infringement results from foregone licensing opportunities.²¹² Rothman considers the use of licensing "custom" particularly because the judge, by using the customary marketplace to determine that a use is fair, effectively presumes an ideal market allocation

206. Rothman, *supra* note 5, at 1911, 1931, 1935.

207. Gibson, *supra* note 5, at 882.

208. *Id.* at 887.

209. *Id.*

210. *Id.* at 884. Decision-makers in prominent copyright industries often have traits that increase the likelihood they will engage in the risk-averse behavior that leads to doctrinal feedback: "high upfront costs, deep pockets, and a tiered distribution network." *Id.* at 887.

211. *See* Rothman, *supra* note 5, at 1931.

212. *See id.* at 1932. Rothman explains the relationship between fair use and forgone licensing opportunities:

Under this rubric, clearance culture practices have an enormous impact on what courts consider allowable uses of others' IP because courts view both existing and potential licensing markets as an indication of whether a use is for profit and also whether a given use is likely to harm the market for the work at issue.

Id.

that does not necessarily exist.²¹³ A great deal of the use of custom in courts' fair use analyses cite to the Supreme Court's decision in *Harper & Row Publishers, Inc. v. Nation Enterprises, Inc.*²¹⁴ The Court's basis for analyzing the fourth fair use factor was "not whether the sole motive of the use is monetary gain but whether the user stands to profit from exploitation of the copyrighted material without paying the customary price."²¹⁵

Although it is possible for contraction of fair use to occur unintentionally, purposeful conduct could increase the rate of copyright's expansion or the breadth of licensing regimes.²¹⁶ Gibson considers much of this shift unintentional, because, assuming copyright holders are not intentionally "gaming the system," the gray areas of intellectual property and the risk-aversion are sufficient to "cause entitlements to grow and public privilege to shrink."²¹⁷ Even many practitioner guides in copyright law advise erring on the side of clearance rather than relying on fair use.²¹⁸ On the other hand, doctrinal feedback becomes less pronounced when "copying is inconspicuous or primarily private."²¹⁹ In particular, a cease-and-desist letter might force a risk-averse secondary user to obtain a license, or large-scale copyright-holders engage in mutual licensing agreements.²²⁰ On the other hand, users "who resist the pressure to license" usually fail to reduce "doctrinal feedback" because there are simply not a lot of them.²²¹ Even if they are numerous, unlicensed users will likely have little influence because (1) they will keep quiet to avoid detection and (2) they will likely "com[e] from smaller-scale projects that do not involve widespread distribution

213. *Id.* at 1935.

214. 471 U.S. 539 (1985).

215. *Id.* at 562.

216. *See* Gibson, *supra* note 5, at 901; Loren, *supra* note 5, at 34–36, 42–43 (1997); Africa, *supra* note 5, at 1174–75.

217. Gibson, *supra* note 5, at 885.

218. *See* Gibson, *supra* note 5, at 891 (citing MICHAEL C. DONALDSON, CLEARANCE & COPYRIGHT 67 (2d ed. 2003); STEPHEN FISHMAN, THE COPYRIGHT HANDBOOK: HOW TO PROTECT & USE WRITTEN WORKS 11/4 (8th ed. 2005); RICHARD STIM, GETTING PERMISSION: HOW TO LICENSE & CLEAR COPYRIGHTED MATERIALS ONLINE & OFF 9/5 (2000)); *see also* RICHARD STIM, GETTING PERMISSION: HOW TO LICENSE & CLEAR COPYRIGHTED MATERIALS ONLINE & OFF 301–302 (2013); STEPHEN FISHMAN, THE COPYRIGHT HANDBOOK: WHAT EVERY WRITER NEEDS TO KNOW 254–60 (2011).

219. Gibson, *supra* note 5, at 887.

220. *See id.* at 901.

221. *See id.* at 899.

through traditional channels.”²²² In addition, if some copyright users are resisting licensing, they will be at a disadvantage in a fair use determination.²²³

Purposeful attempts to strong-arm licensing markets into existence can be inferred from the lawsuits and licenses promulgated by the print news industry. Members of the news industry themselves are not silent on the use of courts to enforce or create customs. Rupert Murdoch has explicitly stated an intention to extract revenue from news aggregators through lawsuits.²²⁴ *International News Service v. Associated Press* has received a great deal of attention due to the court’s role in enforcing norms of the newspaper industry.²²⁵ As in *International News*, the *Meltwater* court may have followed or modified custom to protect the traditional news industries. *Meltwater*, in expanding the legal remedies available to news services, is an example of courts cooperating to create custom in an emerging industry through an expanded application of fair use.

IV. CONCLUSION

Meltwater was a case of first impression, in which the malleability of a transformative use designation and the circularity problem between custom and fair use may have overshadowed a discussion of which industries *ought* to include licensing. This leaves the application of *Meltwater* to other types of aggregators uncertain. In July 2013, after a ruling in favor of AP, the parties settled, forming a “partnership.”²²⁶ *Meltwater* has thus become another licensed AP customer.

Other industries in which “clearance culture” and scraping are common may face the same circularity problem in the judicial system. Although in some cases licensing revenue is mutually beneficial, the circularity problem of the fair use standard presents a potential problem. In a technological sector where new means of analyzing and aggregating data emerge at unprecedented

222. *See id.* at 900.

223. *See id.* at 903; *see also* Princeton Univ. Press v. Mich. Document Servs., Inc., 99 F.3d 1381 (6th Cir. 1996) (finding that a copyright shop that refused to join licensing arrangement competitors was not protected by fair use).

224. *See* Interview by Marvin Kalb with Rupert Murdoch, Chairman and CEO, News Corp., in Washington, D.C. (Apr. 6, 2010), available at https://research.gwu.edu/sites/research.gwu.edu/files/downloads/RupertMurdoch_Transcript.pdf (“And we’re going to stop people like Google and Microsoft, or whoever, from taking our stories for nothing.”).

225. *See* Int’l News Serv. v. Associated Press, 248 U.S. 215, 236 (1918); Carter, *supra* note 202; Douglas G. Baird, *Common Law Intellectual Property and the Legacy of International News Service v. Associated Press*, 50 U. CHI. L. REV. 411 (1983); Epstein *supra* note 3.

226. Mullin, *supra* note 17.

rates, the balance between preservation of old industries and new technologies needs to be addressed thoughtfully, rather than through a pattern of doctrinal feedback.

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SHOULD INTELLECTUAL PROPERTY OWNERS JUST DO IT? AN EXAMINATION INTO THE EFFECTS OF NIKE'S COVENANT NOT TO SUE

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In January 2013, the U.S. Supreme Court manifested its desire to rein in abusive litigation and promote judicial efficiency in the *Already v. Nike*¹ decision. The Court announced a new standard for determining whether a federal court maintains jurisdiction over a case in which a trademark holder commences an infringement claim but consequently issues a covenant not to sue²—a promise by which a party that has a right of action agrees *not* to assert that right in future litigation.³ Establishing that the voluntary cessation standard applied to these situations, the Court attempted to balance the requirements of Article III, which call for a live case or controversy, against the desire to limit the manipulation of a federal court's jurisdiction to avoid a ruling on validity.⁴ Under this standard, the intellectual property holder clearly bears the burden of establishing that its conduct, usually a threat to sue the defendant, cannot reasonably be expected to recur.⁵

A deferral to this standard marks a break with precedent, as the Federal Circuit previously analyzed covenant-not-to-sue cases as independent claims for declaratory judgment.⁶ In the past, the initial burden remained with the accused infringer, not the party attempting to divest the court of jurisdiction, to establish its post-covenant standing by proving there was a continued substantial controversy between the parties.⁷ Despite the Court's allocation of this burden to the trademark owner to show that the possibility of a future

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1. *Already, LLC v. Nike, Inc.*, 133 S. Ct. 721 (2013).

2. See Dalila Argaez Wendlandt & Joseph Van Tassel, *Already v. Nike Decision Takes Middle Ground by Tightening Standards for Covenants Not to Sue But Refusing to Expand Standing to Challenge Validity*, 85 PAT. TRADEMARK & COPYRIGHT J. (BNA) 955, 955 (Apr. 19, 2013).

3. BLACK'S LAW DICTIONARY 419 (9th ed. 2009).

4. See Wendlandt & Tassel, *supra* note 2, at 955.

5. See *id.* at 956.

6. See *id.* at 957.

7. See *id.* at 957; see also *Super Sack Mfg. Corp. v. Chase Packaging Corp.*, 57 F.3d 1054, 1058 (Fed. Cir. 2007) (holding the burden remained with the party seeking a declaratory judgment).

controversy is gone, if an accused infringer wishes to maintain standing and avoid mootness after a covenant has been issued, he must present concrete plans for some type of future conduct outside of the scope of the issued covenant.⁸

Although a covenant not to sue may preserve a trademark owner's right to the mark at the time of the suit, this litigious strategy may have unforeseen adverse consequences, not only on the alleged infringer, but also on the future validity of the mark itself. Covenants can be disruptive to an alleged infringer's business relations, negatively affecting its reputation and funding,⁹ while simultaneously setting the stage for future trademark dilution and potentially afflicting the trademark owner's ability to license and protect its mark.¹⁰ Furthermore, in light of the *Nike* decision, patent holders in particular have tried to use Nike's strategy to moot an action initiated against an alleged infringer. In the majority of cases, however, they have been unsuccessful in constructing a covenant broad enough to satisfy the standards of the voluntary cessation doctrine.

If intellectual property holders wish to use this method to divest a court of Article III jurisdiction, the key consideration is whether a genuine threat of enforcement persists. Looking to the *Nike* case and several more recent patent cases for guidance, it is clear that to eliminate this threat, the covenant must be unconditional, irrevocable, and broad.

This Note examines the general ramifications of a covenant not to sue on alleged infringers and trademark holders and analyzes the ways in which Nike's offensive strategy has affected the intellectual property litigation field. Part I discusses the principles of standing, mootness, and voluntary cessation and their correlation with covenants not to sue in the intellectual property field. Part II inspects the specifics of the *Already v. Nike* Supreme Court decision. Part III argues that a covenant not to sue negatively affects small companies and has the potential to be interpreted by courts as a naked license, and Part IV surveys the ways in which the *Nike* decision has affected current litigation and contends that a successful covenant not to sue needs to be irrevocable, unconditional, and so broad that it fundamentally eliminates all possibilities of future lawsuits.

8. See Wendlandt & Tassel, *supra* note 2, at 957.

9. See Kevin Snell, *Issues, Not Injuries: The Effects of Covenants Not to Sue on Small Competitors*, 74 OHIO ST. L.J. FURTHERMORE 17, 18 (2013) (cautioning judicial restraint when deciding the mootness of a case because of the adverse effects on smaller competitors).

10. Tal S. Benschar, David Kalow & Milton Springut, *Covenant Not To Sue: A Super Sack Or Just A Wet Paper Bag?*, 102 TRADEMARK REP. 1213, 1228 (2012).

I. BACKGROUND

Courts are limited in their ability to adjudicate cases. Section I.A addresses this limitation through a discussion of the judicial doctrines of standing, mootness, and voluntary cessation. Section I.B describes the ways in which covenants not to sue interact with these doctrines and examines the ways in which lower courts have resolved the issuance of covenants not to sue by intellectual property holders.

A. THE GENERAL PRINCIPLES GOVERNING A FEDERAL COURT'S JURISDICTION: STANDING, MOOTNESS, AND VOLUNTARY CESSATION

Under Article III of the United States Constitution, the judicial branch has the authority to decide legal questions in the presence of a “case” or “controversy.”¹¹ In addition, there must be “[a] personal injury fairly traceable to the defendant’s allegedly unlawful conduct [that is] likely to be redressed by the requested relief.”¹² An actual controversy must not only exist at the time a complaint is filed, but must also last through all stages of litigation.¹³ In general, this requirement is easily met because there is a readily identifiable dispute between the parties.¹⁴ However, when a dispute is merely anticipated, the case-or-controversy requirement can preclude judicial intervention.¹⁵ This situation most often occurs when there is a declaratory judgment action.¹⁶

The requirements of Article III are satisfied in the context of a declaratory judgment action so long as the dispute is “definite and concrete, touching the legal relations of parties having adverse legal interests.”¹⁷ As the Court set forth in *MedImmune v. Genentech*, “[t]he question in each case is whether the facts alleged, under all the circumstances, show that there is a

11. “The judicial Power shall extend to all Cases, in Law and Equity, arising under this Constitution, the Laws of the United States . . . to Controversies to which the United States shall be a Party;—to Controversies between two or more States . . .” U.S. CONST. art. III, § 2, cl. 1.

12. *Allen v. Wright*, 468 U.S. 737, 751 (1984).

13. *See Alvarez v. Smith*, 588 U.S. 87, 92 (2009).

14. *See Wendlandt & Tassel, supra* note 2, at 956.

15. *See id.*

16. A declaratory judgment is a “binding adjudication that establishes the rights and other legal relations of the parties without providing for or ordering enforcement.” BLACK’S LAW DICTIONARY 918 (9th ed. 2009).

17. *MedImmune Inc. v. Genentech Inc.*, 549 U.S. 118, 127 (2007) (quoting *Aetna Life Ins. Co. v. Haworth*, 300 U.S. 227, 240–41 (1937)).

substantial controversy between [the] parties . . . of sufficient immediacy and reality to warrant the issuance of a declaratory judgment.”¹⁸

At the commencement of a lawsuit, the case-or-controversy requirement is satisfied when each litigant has standing. To have standing, a plaintiff must have (1) suffered or be threatened with an actual injury (2) that is traceable to the defendant and (3) is likely to be redressed by a favorable judicial decision.¹⁹ The injury suffered cannot be hypothetical or conjectural and must instead be “concrete” and “imminent.”²⁰ Once a lawsuit has commenced on the other hand, this requirement is addressed through the doctrine of mootness. A case becomes moot when circumstances change such that the dispute at issue is no longer “live” or it is impossible for a court to grant any effective relief to the prevailing party.²¹ Because there is no longer a case or controversy at this stage of litigation, a court is divested of its power to decide the case.²² Since the early days of the judicial system, cases were routinely dismissed as moot because the litigation concerned an object that had been destroyed or transferred,²³ or because the litigants were seeking relief that had no possible solution due to a change in circumstances²⁴ or law.²⁵

In addition, under the voluntary cessation doctrine, a case can become moot based on the conduct of the defendant when it is absolutely clear that the behavior at issue is not reasonably expected to recur.²⁶ This standard is necessary so that the defendant is not free to return to its old ways as soon as the case is dismissed.²⁷ This “heavy burden” rests with the party declaring mootness to prove that its voluntary change in conduct resolves the

18. *MedImmune*, 549 U.S. at 127.

19. *See* *Lewis v. Continental Bank Corp.*, 494 U.S. 472, 477 (1990).

20. *See* *Wendlandt & Tassel*, *supra* note 2, at 956 (citing *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560 (1992)).

21. *See* *Knox v. Service Employees International Union, Local 1000*, 132 S. Ct. 2277, 2287 (2012).

22. *See* *Alvarez v. Smith*, 588 U.S. 87, 93 (2009).

23. *See, e.g.*, *Brownlow v. Schwartz*, 261 U.S. 216, 217 (1923) (involving a controversy that became moot once the building at issue was sold to an uninvolved third party); *California v. San Pablo & Tulare R.R.*, 149 U.S. 308, 313–314 (1893) (involving an action that was rendered moot once the tax debt owed was paid by the defendant).

24. *See, e.g.*, *Cheong Ah Moy v. United States*, 113 U.S. 216, 217–18 (1885) (dismissing a habeas petition as moot because the petitioner was deported).

25. *See* Sidney A. Diamond, *Federal Jurisdiction to Decide Moot Cases*, 94 U. PA. L. REV. 125, 132 (1946) (describing instances where a change in the law that governed the situation at hand rendered the litigation moot).

26. *See* *Friends of the Earth, Inc. v. Laidlaw Env'tl. Servs. (TOC), Inc.*, 528 U.S. 167, 189 (2000).

27. *See* *United States v. W.T. Grant Co.*, 345 U.S. 629, 632 (1953).

controversy at hand and extinguishes the plaintiff's standing so that the court no longer possesses the requisite subject matter jurisdiction to decide the case.²⁸

The voluntary cessation doctrine is efficiently illustrated in *Friends of the Earth, Inc. v. Laidlaw Environmental Services*.²⁹ In *Friends of the Earth*, the Court found that an industrial polluter could not claim that the case was moot even though the company had ceased polluting after the commencement of litigation, achieved compliance with the allowed amount of authorized pollutants, and closed down the factory responsible for the suit.³⁰ The Court recognized that so long as the company retained a license to operate such a factory, a similar enterprise could occur elsewhere, and it was not absolutely clear that the wrongful behavior would not recur.³¹

Therefore, in a traditional declaratory judgment action, the plaintiff seeking the declaratory judgment bears the burden of establishing standing, but under the voluntary cessation doctrine, the initial burden rests with the party who is arguing that his voluntary change in conduct extinguishes the plaintiff's standing because it resolves the controversy at hand.³² Prior to the Supreme Court's decision in *Nike*, several lower courts addressed the effects of a covenant not to sue on a federal court's continued jurisdiction over an intellectual property claim by treating the invalidity counterclaim proffered by the alleged infringer as an independent claim for declaratory judgment,³³ avoiding the use of the voluntary cessation doctrine.

B. COVENANTS NOT TO SUE AND THE STANDING QUESTION

The cases addressed by several lower courts prior to the decision in *Nike* followed the same general pattern: an intellectual property holder (usually a patent or trademark owner) sued another party alleging infringement, and the defendant counterclaimed for declaratory judgment asking the court to invalidate the patent or trademark.³⁴ Recognizing that an unfavorable judicial

28. See *Wendlandt & Tassel*, *supra* note 2, at 956.

29. 528 U.S. 167 (2000).

30. *Id.* at 193–94.

31. *Id.* at 189.

32. See *id.* at 170; see also *Wendlandt & Tassel*, *supra* note 2, at 958.

33. The Declaratory Judgment Act is codified at 28 U.S.C. § 2201 (2012); the burden is on the party claiming declaratory judgment jurisdiction to establish that such jurisdiction existed at the time the claim for declaratory relief was filed and that it has continued since. See *Super Sack Mfg. Corp. v. Chase Packaging Corp.*, 57 F.3d 1054, 1060 (Fed. Cir. 1995), *overruled in part by* *MedImmune, Inc. v. Genentech, Inc.*, 549 U.S. 118 (2007).

34. See, e.g., *Amana Refrigeration Inc. v. Quadlux, Inc.*, 172 F.3d 852, 852 (Fed. Cir. 1999); *Super Sack*, 57 F.3d 1054, 1055; *Benitec Australia, Ltd., v. Nucleonics, Inc.*, 495 F.3d

ruling of invalidity was likely, the intellectual property owner then backed away from its original claim, offered a covenant not to sue, and moved to dismiss the case and the invalidity counterclaim for lack of subject matter jurisdiction.³⁵ The covenant not to sue served as a release of liability, discharging the alleged infringer from any legal responsibility.³⁶

Traditionally, the U.S. Court of Appeals for the Federal Circuit addressed covenant-not-to-sue cases by treating the invalidity counterclaim as an independent claim for declaratory judgment, placing the burden on the declaratory judgment plaintiff to establish its post-covenant standing.³⁷ Jurisdiction was easily divested by the issuance of a covenant not sue, which, as the Federal Circuit held prior to the *MedImmune* decision, did not need to cover future products, but only current and past products, to resolve the controversy at hand and force a dismissal.³⁸

Previously, for a defendant to maintain standing and bring a claim of invalidity there had to be an explicit threat or other action creating a reasonable apprehension of imminent suit *and* there had to be present activity that could constitute infringement.³⁹ However, in *MedImmune*, the Court found this standard to be too narrow, and the Court decided that a standard applying the totality of circumstances, based on the particular facts and relationships involved, was a better test to determine whether an actual case or controversy continued to exist.⁴⁰

In *Revolution Eyewear*,⁴¹ the Federal Circuit noted that its continued ability to adjudicate a case depends on what is covered by the covenant. However, the court continued to place the initial burden on the accused infringer alleging invalidity to establish a live controversy for purposes of Article III standing.⁴² The court found that an unconditional “covenant not to sue . . .

1340, 1342 (Fed. Cir. 2007); *Revolution Eyewear, Inc. v. Aspex Eyewear, Inc.*, 556 F.3d 1294, 1295 (Fed. Cir. 2009).

35. See *Wendlandt & Tassel*, *supra* note 2, at 958; see, e.g., *Already, LLC v. Nike, Inc.*, 133 S. Ct. 721, 727 (2013).

36. This discharge is enforceable under contract law. See RESTATEMENT (SECOND) OF CONTRACTS § 285 (1981).

37. See, e.g., *Super Sack*, 57 F.3d 1054 at 1060.

38. *Wendlandt & Tassel*, *supra* note 2, at 958; see also *Amana*, 172 F.3d at 855–56, (“The Quadlux covenant ensures that Quadlux is forever estopped from asserting liability against Amana in connection with any products that Amana advertised, manufactured, marketed, or sold before [the covenant issue date], and that resolves the controversy.”).

39. See *BP Chems. Ltd. v. Union Carbide Corp.* 4 F.3d 975, 978 (Fed. Cir. 1993).

40. *MedImmune, Inc. v. Genentech, Inc.*, 549 U.S. 118, 126 (2007).

41. *Revolution Eyewear, Inc. v. Aspex Eyewear, Inc.*, 556 F.3d 1294, 1297 (Fed. Cir. 2009).

42. See *Wendlandt & Tassel*, *supra* note 2, at 958.

for patent infringement under the [patent in suit] based upon any activities and/or products made, used, or sold on or before the dismissal of this action”⁴³ was insufficient to eradicate an actual controversy because the alleged infringer had concrete plans to reintroduce the accused eyewear products into the market.⁴⁴ In fact, the patentee suggested that it would file an additional claim if the alleged infringer actually were to do so.⁴⁵

In *Benitec v. Nucleonics*,⁴⁶ the court applied the same standard as articulated in *MedImmune* but found that the accused infringer had not met its burden.⁴⁷ The covenant not to sue for patent infringement sufficed to strip the court of its declaratory judgment jurisdiction because the defendant, Nucleonics, failed to show that its future plans met the immediacy requirement of *MedImmune*.⁴⁸ Nucleonics only pointed to discussions with unnamed customers and stated that they “expected” to begin work “shortly” on new products that could fall outside of the scope of the covenant.⁴⁹ In addition, Nucleonics only had a vaguely defined expansion plan of its production line from human health into animal husbandry, and the fact that they *could* file a New Drug Application in a few years failed to meet the immediacy and reality requirements for a declaratory judgment action.⁵⁰

Although the majority followed the precedent set out in *MedImmune*, Judge Dyk dissented on the grounds that a “different test for determining whether there is a case or controversy applies when the allegation of infringement is withdrawn during the course of litigation”⁵¹ and expressed concern about the manipulative ways in which an intellectual property holder could try to divest the court of jurisdiction.⁵² Judge Dyk argued that under the proper standard, once the court established there would be a declaratory judgment, the party seeking to divest the court of jurisdiction should prove that there is no longer a current case or controversy by using the voluntary

43. *Revolution Eyewear*, 556 F.3d at 1296.

44. During the course of litigation the defendant had stopped selling the goods at issue but still retained an inventory of the accused product, and because they were able to re-enter the market with those same products and the plaintiff had reserved the right to sue on the basis of those products, the case was not moot. Benschar, Kalow & Springut, *supra* note 10, at 1220.

45. *Id.* at 1299.

46. *Benitec Australia, Ltd. v. Nucleonics, Inc.*, 495 F.3d 1340 (Fed. Cir. 2007).

47. *Id.* at 1340.

48. *Id.* at 1344. Under *MedImmune*, adverse legal interests need to have sufficient immediacy and reality to warrant the issuance of a declaratory judgment. *Id.* at 1343–44.

49. *Id.* at 1347.

50. *Id.* at 1343, 1346.

51. *Id.* at 1350 (Dyk, J., dissenting).

52. *Id.* at 1352.

cessation doctrine.⁵³ Judge Dyk's argument directly foreshadowed the *Nike* decision and mirrored much of the eventual rationale the Supreme Court employed in examining Nike's covenant not to sue.⁵⁴

Lastly, and in contrast with prior Federal Circuit decisions, in *Bancroft & Masters v. Augusta National*,⁵⁵ the Ninth Circuit applied the voluntary cessation doctrine⁵⁶ (much in line with Judge Dyk's reasoning) when deciding the court's jurisdictional reach over a case arising out of a dispute over the domain name masters.com, owned by Bancroft & Masters ("B & M"), a company that sold computer and networking products. B & M brought an anti-dilution and anti-infringement claim against the Augusta National Golf Club in Georgia, which sponsors the annual Professional Golfers' Association ("PGA") Tour event known as the Masters, after the golf club sent a letter to B & M challenging their use of the domain name.⁵⁷ Augusta National argued that the case had been rendered moot because it offered to waive all trademark infringement, dilution, and unfair competition claims against B & M so long as the company stayed out of the golf business.⁵⁸ However, the court found that Augusta National's promise was incomplete and qualified because it was not absolutely clear that they would never seek to prevent B & M from using its domain name in the future.⁵⁹ It also held, contrary to the *Nike* decision, that the invalidity proceeding was a separate cause of action that did not require an ongoing controversy.⁶⁰

The above cases illustrate the muddy waters surrounding the examination of covenants not to sue. Prior to *Nike*, several courts treated invalidity counterclaims as independent declaratory judgment actions, while the Ninth Circuit employed the voluntary cessation doctrine to settle the dispute at

53. *Id.*

54. Judge Dyk noted that this case was not one "in which the patentee suffered an adverse judgment, but rather one in which it voluntarily abandoned its infringement suit in the light of unfavorable developments." *Id.* at 1353. Furthermore, he noted that "[i]t is particularly inappropriate to place the burden of establishing continuing jurisdiction on declaratory plaintiffs where, as here, the claim of mootness is the result of the opposing party's acts designed, at least in part, to defeat declaratory jurisdiction." *Id.*

55. *Bancroft & Masters, Inc. v. Augusta National Inc.*, 223 F.3d 1082 (9th Cir. 2000).

56. The court relied on the reasoning of another Ninth Circuit decision to guide their applicability of the voluntary cessation doctrine in this case. *See F.T.C. v. Affordable Media, LLC*, 179 F.3d 1228, 1238 (9th Cir. 1999) (noting that if there is even a possibility of the behavior at issue recurring, the case is not moot).

57. *Id.* at 1085. The golf club also asked B & M to cease and desist use of the domain name and to transfer it immediately to Augusta National. *Id.*

58. *Id.*

59. *Id.*

60. *Id.*

hand. The Supreme Court jumped into the fray and tried to clarify this area of law through its decision in *Nike*.

II. *ALREADY V. NIKE*

On January 9, 2013, the Supreme Court held that Nike, Inc.'s unconditional and irrevocable covenant not to enforce its Air Force 1 trademark against Already, LLC mooted Already's action to have the trademark declared invalid and cancelled.⁶¹ In a 9-0 opinion, with a concurring opinion filed by Justice Kennedy, the Court announced that Nike's broad covenant not to sue satisfied the voluntary cessation doctrine.⁶²

A. FACTS AND PROCEDURAL HISTORY

Already and Nike are competing businesses that design, manufacture, and sell athletic footwear.⁶³ Already manufactures two shoe lines known as "Sugars" and "Soulja Boys" that are similar in design and overall look to Nike's Air Force 1 shoe line.⁶⁴ Nike, alleging that the Soulja Boys and Sugars infringed and diluted the Air Force 1 trademark,⁶⁵ ordered Already to cease and desist the sale of its shoes.⁶⁶ Already denied the allegations and filed a counterclaim challenging the validity of Nike's Air Force 1 trademark.⁶⁷

61. *Already, LLC v. Nike, Inc.*, 133 S. Ct. 721, 725 (2013).

62. *Id.*

63. *Id.*

64. The Air Force 1 is a popular Nike shoe that has been in production since 1982 and is one of Nike's best-selling shoe designs. Respondent's Brief in Opposition at 3, *Already, LLC v. Nike, Inc.*, 133 S. Ct. 721 (2013) (No. 11-982). The shoe has existed in more than 1,700 color combinations and millions of pairs are sold annually. *Nike, Inc. v. Already, LLC*, No. 09 Civ. 6366, 2011 WL 310321, at *1 (S.D.N.Y. Jan. 20, 2011).

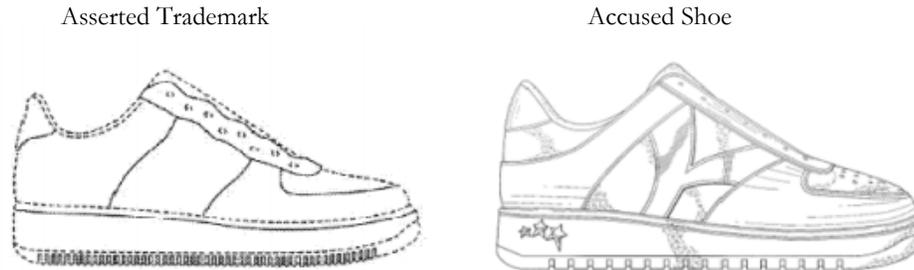
65. *Nike*, 133 S. Ct. at 725. Nike's registration for the Air Force 1 mark states:

The mark consists of the design of the stitching on the exterior of the shoe, the design of the material panels that form the exterior body of the shoe, the design of the wavy panel on top of the shoe that encompasses the eyelets for the shoe laces, the design of the vertical ridge pattern on the sides of the sole of the shoe, and the relative position of these elements to each other. The broken lines show the position of the mark and are not claimed as part of the mark.

NIKE AIR FORCE 1, Registration No. 77,055,375.

66. *Nike*, 133 S. Ct. at 721.

67. *Id.* at 723.

Figure 1: Nike's Air Force 1 & Already's Soulja Boys⁶⁸

Eight months after Nike filed the initial lawsuit, the company issued a “Covenant Not to Sue,” promising that it would not raise any trademark or unfair competition claims against Already.⁶⁹ The covenant was unconditional and irrevocable; it went beyond merely prohibiting Nike from filing a lawsuit and instead barred Nike from making any claim or demand against Already.⁷⁰ The covenant also protected Already’s customers and distributors and covered not only past and current products,⁷¹ but also any future “colorable imitations.”⁷²

Following the issuance of the covenant, Nike moved to dismiss its claims with prejudice and to dismiss Already’s counterclaim without prejudice on the ground that the covenant had eliminated the case or controversy,

68. Lyle Denniston, *Argument Preview: Does No Suit Mean No Suit?*, SCOTUSblog (Nov. 6, 2012), <http://www.scotusblog.com/2012/11/argument-preview-does-no-suit-mean-no-suit/>.

69. *Nike*, 133 S. Ct. at 725.

70. *Id.*

71. *Id.* at 728. More specifically, the covenant provided that:

[Nike] unconditionally and irrevocably covenants to refrain from making any claim(s) or demand(s) . . . against Already or any of its . . . related business entities . . . [including] distributors . . . and employees of such entities and all customers . . . on account of any possible cause of action based on or involving trademark infringement, unfair competition, or dilution under state or federal law . . . relating to the NIKE Mark based on the appearance of any of Already’s current and/or previous footwear product designs, and any colorable imitations thereof, regardless of whether that footwear is produced . . . or otherwise used in commerce before or after the Effective Date of this Covenant.

Id.

72. *Id.* “Colorable imitation” is defined by statute as “any mark which so resembles a registered mark as to be likely to cause confusion or mistake or to deceive.” 15 U.S.C. § 1127 (2012).

fulfilling the voluntary cessation standard.⁷³ Already opposed dismissal of its counterclaim, arguing that Nike had not established that its covenant and voluntary cessation mooted the case.⁷⁴

The district court dismissed Already's counterclaim for invalidity, finding that Already failed to demonstrate that the court possessed the requisite jurisdiction to hear the case.⁷⁵ The court read Nike's covenant so broadly that it concluded that any of Already's future footwear would be protected as a "colorable imitation" of its current products.⁷⁶ Finding that there was no evidence of any development of a shoe that was not covered by the covenant, the court held that there was no longer a substantial controversy that warranted a declaratory judgment.⁷⁷

On appeal, the Second Circuit affirmed the District Court's opinion and held that when "determining whether a covenant not to sue eliminates a justiciable case or controversy . . . [courts should look to the] totality of the circumstances test . . . [which includes]: (1) the language of the covenant, (2) whether the covenant covers future, as well as past, activity and products, and (3) evidence of intention or lack of intention, on the part of the party asserting jurisdiction."⁷⁸ Again, finding little evidence of a shoe that would infringe the Air Force 1 trademark but not fall within the covenant, the Second Circuit held that there was no longer a continuing injury warranting relief.⁷⁹

The Supreme Court granted certiorari.⁸⁰ The Court affirmed the decision to dismiss Already's invalidity counterclaim and stated that a remand was not appropriate.⁸¹ The Court held that (1) Nike had the burden to show it could not reasonably be expected to resume its enforcement efforts against Already and (2) Nike could not reasonably be expected to resume its enforcement efforts (based on the language of the issued covenant), mooting Already's invalidity counterclaim.⁸²

73. *Nike*, 133 S. Ct. at 728.

74. *Id.*

75. *Id.* at 726.

76. *Id.*

77. *Id.* Following the *MedImmune* standard, the court held that there was no longer a "substantial controversy of sufficient immediacy and reality to warrant the issuance of a declaratory judgment." *Id.* (quoting *MedImmune, Inc. v. Genentech, Inc.*, 549 U.S. 118, 127 (2007)).

78. *Id.* (citing *Nike, Inc. v. Already, LLC*, 663 F.3d 89, 96 (2d Cir. 2011) (internal quotations omitted)).

79. *Id.*

80. *Id.* at 726.

81. *Id.* at 721.

82. *Id.*

B. ANALYSIS OF THE COURT

The main issue the Supreme Court addressed in its opinion was whether there continued to be a case or controversy between Nike and Already after the issuance of the covenant not to sue.⁸³ The answer to this issue turned on the determination of whether or not Already had the requisite standing needed to bring its invalidity claim against Nike's Air Force 1 trademark after Nike issued its covenant not to sue.⁸⁴ The Court noted that once a case or controversy disappears, the case becomes moot.⁸⁵

Because the burden (when applying the voluntary cessation doctrine) falls on the party who claims that its voluntary compliance ceases the controversy, the Court ruled that Nike had to show that it could "not reasonably be expected to resume its enforcement efforts against Already."⁸⁶ Once this was established, the case before the Court became a fact-intensive inquiry as to determine whether or not Nike's behavior would indeed recur. To make this determination, the Court examined the language Nike used in its covenant not to sue.⁸⁷

The Court determined that Nike authored a broad, unconditional, and irrevocable covenant that reached Already's distributors and customers and covered not only current or previous designs, but also any colorable imitations.⁸⁸ Hence, the Court concluded that Nike had satisfied the voluntary cessation standard.⁸⁹ The burden then shifted to Already to show that it intended to market and manufacture a product that could infringe on the Air Force 1 trademark yet not fall within the scope of the covenant.⁹⁰

On this point, the Court indicated that Already did not put forth any credible evidence in the lower courts or during oral arguments to satisfy this burden.⁹¹ The Court went so far as to state, "[i]f such a shoe exists, the

83. *Id.*

84. *Id.* At the outset of litigation, both parties had standing to pursue their claims in court. Nike had standing to sue because Already's activity allegedly infringed under trademark law, and Already had standing to file its counterclaim because Nike was allegedly pursuing an invalid trademark to halt Already's legitimate business activity. *Id.* at 727.

85. *Id.*

86. *Id.* at 723.

87. *Id.* at 727.

88. *Id.*

89. *Id.*

90. *Id.* at 728.

91. *Id.* at 729. When given the opportunity before the district court, Already did not assert any intent to design or market a shoe that could possibly give rise to any infringement liability. *Id.* (citing Petition for Writ of Certiorari for Defendant-Appellant at 31a, *Already, LLC v. Nike, Inc.*, 133 S. Ct. 721 (2013) (No. 11-982) (finding that there was "no indication" of any such intent); *Nike, Inc. v. Already, LLC*, 663 F.3d 89, 97 (2d Cir. 2011) (noting the

parties have not pointed to it, there is no evidence that Already has dreamt of it, and we cannot conceive of it. It sits, as far as we can tell, on a shelf between Dorothy's ruby slippers and Perseus's winged sandals."⁹²

The Court then analyzed Already's proposed alternative theories of Article III injury to support its standing argument,⁹³ noting that Already could not "rely on theories of Article III injury that would fail to establish standing in the first place"⁹⁴ outside the context of a covenant not to sue.

First, Already argued that as long as Nike is free to assert its trademark, investors would be hesitant to invest in Already.⁹⁵ The mere existence of the covenant, Already argued, would hamper its ability to attract capital.⁹⁶ However, the Court asserted that concrete injury is necessary to establish standing, and any hypothetical or conjectural speculation among investors is not adequate to give rise to an "actual" injury required for Article III standing.⁹⁷

Second, Already argued that Nike's decision to sue in the first place left the company fearing another suit.⁹⁸ However, the Court quickly rejected Already's argument, as the terms of the covenant were expressly made to extinguish any reasonable fear of a future suit, and the Court has "never held that a plaintiff has standing to pursue declaratory relief merely on the basis of being 'once bitten.'"⁹⁹

Third, Already argued that as one of Nike's competitors, it inherently possessed standing because no covenant can eradicate the effects of a registered but invalid trademark.¹⁰⁰ According to Already, allowing Nike to moot the case destabilized the important role federal courts play in the administration of federal patent and trademark law.¹⁰¹ However, under this

"absence of record evidence that [Already] intends to make any arguably infringing shoe that is not unambiguously covered by the Covenant"). The only affidavit submitted was from the company's president, merely stating that Already had current plans to introduce new and modify existing shoe lines. On appeal in the Second Circuit, counsel for Already was asked at oral argument whether his client had any intention to design or market a shoe that would even arguably fall outside the covenant, and he could not provide a suitable answer, which was reconfirmed during oral arguments in the Supreme Court. Transcript of Oral Argument at 6–8, *Already, LLC v. Nike, Inc.*, 133 S. Ct. 721 (2013) (No. 11-982).

92. *Nike*, 133 S. Ct. at 728.

93. *Id.* at 729.

94. *Id.* at 730.

95. *Id.* at 729–30.

96. *Id.* at 730.

97. *Id.*

98. *Id.* at 729.

99. *Id.* at 730.

100. *Id.*

101. *Id.*

approach, the Court reasoned that Nike did not even need to threaten suit first.¹⁰² Already, without any plans to market a shoe resembling the Air Force 1, could sue to invalidate the trademark merely because the two companies were in the same line of business and participated in the same market.¹⁰³ This “boundless theory of standing[.]” the Court noted, had never been accepted and could not be recognized.¹⁰⁴

Ultimately, the Court refused to adopt Already’s multiple policy objections calling for standing and found insufficient Already’s argument that a dismissal of its case allowed Nike to bully small companies.¹⁰⁵ Although the Court acknowledged that such a theory could allow larger companies to attack the portfolios of smaller rivals in the name of competitive injury,¹⁰⁶ the Court explained that this principle would only further encourage parties to employ litigation as a weapon instead of a last resort, as “lowering the gates for one party lowers the gates for all.”¹⁰⁷ Endless attempts at invalidation (initiated by smaller or larger companies) under Already’s theory could potentially swamp an overburdened court system.¹⁰⁸

Although Justices Kennedy, Thomas, Alito, and Sotomayor agreed with the Court’s holding, they believed that the two lower courts issued their rulings on the “erroneous premise” that Already carried the burden to make the relevant showing.¹⁰⁹ Justice Kennedy noted, and reiterated the majority’s finding, that in the present circumstance, Nike needed to demonstrate that its covenant not to sue was of “sufficient breadth and force that Already can have no reasonable anticipation of a future trademark infringement claim from Nike.”¹¹⁰ The concurrence proposed that part of a trademark holder’s burden in showing that a case is moot ought to require the party to make a “substantial showing that the business of the competitor and its supply network will not be disrupted or weakened by satellite litigation over mootness or by any threat latent in the terms of the covenant itself.”¹¹¹

102. *Id.*

103. *Id.*

104. *Id.*

105. *Id.*

106. *Id.*

107. *Id.* “As a result, larger companies with more resources will have standing to challenge the intellectual property portfolios of their more humble rivals—not because they are threatened by any particular patent or trademark, but simply because they are competitors in the same market.” *Id.*

108. *Id.*

109. *Id.* at 733 (Kennedy, J., concurring). The Second Circuit explicitly applied the *MedImmune* test. *Nike, Inc. v. Already, LLC*, 663 F.3d 89, 96–97 (2d Cir. 2011).

110. *Nike*, 133 S. Ct. at 733 (Kennedy, J., concurring).

111. *Id.* at 734.

Furthermore, the concurrence emphasized the importance of caution when dealing with covenants not to sue.¹¹² The Court noted that covenants should not be a spontaneous method for a party who has instigated a trademark infringement suit to avoid the potential for adverse judicial review.¹¹³ In addition, courts should take into account the potential ramifications that litigation can have on affiliated entities of a business threatened with a trademark infringement suit and should carefully consider these effects when relying on a covenant not to sue to moot a case.¹¹⁴

III. THE EFFECTS OF A COVENANT NOT TO SUE

Covenants not to sue impact both the trademark holder and the alleged infringer. Section III.A discusses how smaller companies are affected by the issuance of a broad covenant, while Section III.B examines the potential interpretations of a covenant not to sue and argues it is most similar to that of a naked license.

A. SMALL COMPANIES ARE NEGATIVELY IMPACTED BY AN EXPANSIVE COVENANT NOT TO SUE

Justice Kennedy's concurrence recognized several issues that covenants not to sue present, highlighting that “[they are not] an automatic means for the party who first charged a competitor with trademark infringement suddenly to abandon the suit without incurring the risk of an ensuing adverse adjudication.”¹¹⁵ Because there are not many cases dealing with the effects of covenants not to sue on ongoing litigation, careful consideration is required when a party uses this tactic to moot a case.¹¹⁶

Charges of infringement can be disruptive to the business relations between an allegedly infringing smaller company and its “distributors, retailers, and investors.”¹¹⁷ Pending litigation represents an additional risk that could possibly dissuade investment or keep partnerships from forming.¹¹⁸ Although the point of a covenant not to sue is to clear the air and

112. *Id.*

113. *Id.*

114. *Id.*

115. *Id.* at 733.

116. *Id.* at 734; Snell, *supra* note 9, at 18.

117. *See* Snell, *supra* note 9, at 18.

118. Already presented affidavits from potential investors alleging Nike's actions prompted them to not invest in the company. *Nike*, 133 S. Ct. at 730. As part of Nike's aggressive enforcement of its trademark, Already also alleged that Nike threatened retailers with cancelling its accounts or delaying its shipments if retailers continued to sell Already's products in their stores. *Id.*

give the alleged infringer the unequivocal right to keep manufacturing its product, the litigation process itself can disincline investment. Justice Kennedy warned about this exact scenario when stating that “[t]he mere pendency of litigation can mean that other actors in the marketplace may be reluctant to have future dealings with the alleged infringer.”¹¹⁹

Furthermore, such a covenant may force a smaller competitor to reveal future plans (to avoid mootness) or become more tentative when designing future products in an effort to design around the alleged mark if the covenant is not sufficiently broad or does not include “colorable imitations.”¹²⁰ Revealing future plans may give other companies a competitive edge, and a cautious design process slows down the time it takes to get a product from the design table to the market, which incurs additional costs.¹²¹ For these reasons, covenants make it more difficult for smaller companies to raise additional capital while trying to split resources between innovation and legal counsel.¹²²

In addition, a court must be wary of a situation in which a covenant not sue is used as a litigious weapon, as it offers practical advantages for large companies because it “provides [an intellectual property holder] additional time to monitor a competitor’s business to determine if a trial is worthwhile”¹²³ and can drain the resources of the opposing party. If an alleged infringer has unsuccessful products on the market and decides to counterclaim, the intellectual property holder may decide that the cost of litigation is not worthwhile in light of the opposing party’s products’ lack of success.¹²⁴ On the other hand, if the trial is quick, the covenant is helpful to the intellectual property holder because it allows an “escape from litigation” and provides “the time and opportunity to examine the strength of its allegations.”¹²⁵

If an intellectual property holder alleges infringement against a smaller competitor, it does so in hopes of a settlement. In the rare instance where the challenger resists, or counterclaims with an invalidity claim, the intellectual property holder can issue a broad covenant, forcing the alleged infringer to

119. *Id.* at 735 (Kennedy, J., concurring).

120. *See* Snell, *supra* note 9, at 18.

121. *See id.* at 20; Reply Brief for Petitioner at 13–14, *Already, LLC v. Nike, Inc.*, 133 S. Ct. 721 (2013) (No. 11-982); Transcript of Oral Argument, *supra* note 91, at 8–9.

122. *See* Snell, *supra* note 9, at 19.

123. *Id.* at 19.

124. *See id.*; Brief for Petitioner at 15, *Already, LLC v. Nike, Inc.*, 133 S. Ct. 721 (2013) (No. 11-982) (stating that Nike’s covenant mentioned that *Already*’s actions no longer warranted the expense of litigation).

125. Snell, *supra* note 9, at 19.

invest more money and resources into proving their continued standing in the case by presenting concrete proof that they have plans to market and produce a product falling outside of the covenant.¹²⁶ If the issued covenant is successful, it converts the alleged infringer into an involuntary licensee.¹²⁷ Moreover, even if an intellectual property holder does not succeed in litigation, its covenant reasserts the allegation that the competitor's product infringes, having an adverse effect on the competitor's reputation in the marketplace with consumers and potential business partners.¹²⁸

In light of a clear harm to smaller parties, future courts must hold intellectual property owners to the “formidable burden” established in *Nike* to prevent misuse. Taking Justice Kennedy's words to heart, courts should “proceed with caution” before deciding that a covenant not to sue moots a case and divests the court of jurisdiction.¹²⁹ In addition, smaller competitors should be wary of counterclaiming with an invalidity claim unless they are ready for potentially lengthy litigation and possess the requisite plans to market a product falling outside the scope of the covenant.

B. A BROAD COVENANT NOT TO SUE MAY SET THE STAGE FOR TRADEMARK DILUTION

Assuming that a covenant not to sue is drafted broadly enough to moot a case, an intellectual property holder's rights are preserved with regard to future assertions against other parties.¹³⁰ However, this line of reasoning assumes that the covenant will have little effect on the validity of the intellectual property itself.¹³¹ Although this may hold true in the majority of patent cases, trademarks are susceptible to dilution, and any failure to enforce the mark in question may have negative effects on a trademark holder's rights.¹³²

126. *See id.* This is especially true if the smaller company wishes to invalidate the trademark or patent, as concrete proof is necessary to keep the case live.

127. *See* *Already, LLC v. Nike, Inc.*, 133 S. Ct. 721, 731 (2013); Transcript of Oral Argument, *supra* note 91, at 10 (noting that *Already* preferred not to be “the involuntary licensee of the [company] that sued it”).

128. *See* Transcript of Oral Argument, *supra* note 91, at 11–12, 19. Nike's covenant continued to allege infringement. The covenant was issued merely because *Already* did not infringe “at a level sufficient to warrant the substantial time and expense of continued litigation.” Brief for Petitioner, *supra* note 124, at 15.

129. *Nike*, 133 S. Ct. at 734 (Kennedy, J., concurring).

130. *See* *Benschar, Kalow & Springut*, *supra* note 10, at 1228.

131. *See id.*

132. *See id.* A trademark is defined as “any word, name, symbol, or device, or any combination thereof” that a person uses or has intent to use to “identify and distinguish his or her goods, including a unique product, from those manufactured and sold by others and

A trademark owner's actions or inactions with respect to one potential infringer may weaken the general validity of a mark by undermining the mark's ability to function as a symbol of source.¹³³ There are three trademark doctrines where this concept has been applied: (1) failure to enforce, (2) consent to use agreements, and (3) naked licensing. Although courts have not attempted to construe a covenant not to sue in terms of these categories, it is possible (though perhaps unlikely) that in the future, this type of covenant may fit into the category of a naked license.

1. *Failure to Enforce*

The easiest and most obvious way to construe a covenant not to sue is to interpret the covenant as a failure to enforce one's mark. In the *Nike* case, Nike clearly decided not to enforce its Air Force 1 trademark against Already.¹³⁴ As case law in this area is ambiguous, it is unclear what a lack of enforcement against one party means for third parties engaged in similar behavior.¹³⁵ However, three possible positions can be taken when evaluating the effects against a new infringer in a later case when there was a failure to enforce a trademark against an earlier infringer.¹³⁶ The first view is that the effect is irrelevant because "a defendant cannot rely upon the wrongdoing of others to exculpate itself from its own infringing activities."¹³⁷ Second, a failure to enforce may constitute an abandonment of the trademark. And

to indicate the source of the goods, even if that source is unknown." 15 U.S.C. § 1127 (2012).

133. See Benschar, Kalow & Springut, *supra* note 10, at 1228. A trademark owner can only prevent uses of the mark that are likely to cause confusion as to the source or sponsorship of the product or service. As Justice Holmes once remarked:

Then what new rights does the trade-mark confer? It does not confer a right to prohibit the use of the word or words. It is not a copyright A trade-mark only gives the right to prohibit the use of it so far as to protect the owner's good will against the sale of another's product as his When the mark is used in a way that does not deceive the public, we see no such sanctity in the word as to prevent its being used to tell the truth. It is not taboo.

Id. (citing *Prestonettes, Inc. v. Coty*, 264 U.S. 359, 368 (1924)).

134. *Nike*, 133 S. Ct. at 721.

135. See Benschar, Kalow & Springut, *supra* note 10, at 1229.

136. See *id.* (citing 3 J. THOMAS MCCARTHY, MCCARTHY ON TRADEMARKS AND UNFAIR COMPETITION § 17:17 (4th ed. 2012)).

137. *Id.* (citing *Counsel of Better Bus. Bureaus, Inc. v. Better Bus. Bureau of S. Fla.*, 200 U.S.P.Q. 282 (S.D. Fla. 1978), *vacated on other grounds* No. 78-937, 1980 WL 581291 (S.D. Fla. July 9, 1990)).

third, a failure to enforce is only partially relevant in that it may show a weakening of the plaintiff's mark through use by others in the market.¹³⁸

Thus, under the third position, the mere fact that there is an infringer that the plaintiff chooses not to pursue does not automatically give rise to a loss of rights. However, when there are multiple products in the marketplace bearing the mark at issue, the ability of the mark to function as a designation of source is diminished and perhaps completely lost.¹³⁹ This scenario presented itself to the Supreme Court in *Saxlehner v. Eisner & Mendelson Co.*¹⁴⁰ There, the Court held that a twenty-year period of inaction in which other importers used the mark—HUNYADI, a Hungarian mineral water—meant it was too late to resuscitate the original title, signaling a complete loss of rights in the trademark.¹⁴¹

A sufficiently broad covenant not to sue requires a court to observe the volume of products visibly out on the market and to look at the effects (if any) on public perception regarding the trademark or trade dress subject to the covenant.¹⁴² When looking at the covenant issued by Nike, it is important to note that the covenant did not limit quantities. Therefore, Already has every right to flood the market with imitations and various designs covered by the covenant if it is financially feasible and it so desires. This could potentially change consumer perceptions and in turn weaken Nike's Air Force 1 trademark.¹⁴³

However, it may be unwise to equate a covenant not to sue with a failure to enforce because a trademark holder can always reverse a failure to enforce (subject only to the defense of laches), while a covenant not to sue is permanent against the designee. For example, a trademark owner could permit infringement in small quantities, but may later decide to enforce its rights if the activity exponentially expands or becomes more egregious, while a trademark owner who issues a covenant not to sue binds itself not to sue on *any* infringement similar in character indefinitely into the future.¹⁴⁴ Therefore, a covenant not to sue is a “far more significant undermining” of

138. See Benschar, Kalow & Springut, *supra* note 10, at 1229. This position was the one endorsed by Professor McCarthy. See MCCARTHY, *supra* note 136, § 17:17.

139. See Benschar, Kalow & Springut, *supra* note 10, at 1229.

140. *Saxlehner v. Eisner & Mendelson Co.*, 179 U.S. 19 (1900).

141. *Id.* at 36–37.

142. See Benschar, Kalow & Springut, *supra* note 10, at 1229.

143. See *id.* at 1230.

144. See *id.* Courts have excused a trademark owner that delayed in suing one defendant because it was burdened by enforcement costs against other infringers. MCCARTHY, *supra* note 136, § 31:16.

trademark rights than is a mere decision not to enforce against a particular infringer.¹⁴⁵

2. *Consent to Use Agreements*

A second construing of a covenant not to sue could frame the covenant as a “consent to use” agreement in which one party, the trademark owner, consents to the other party’s use of its trademark within a defined set of boundaries and promises not to sue so long as the party keeps its use within the agreed upon specified boundaries.¹⁴⁶ These boundaries may limit use to certain formats of the mark, within specific geographical territories, or on certain lines of goods.¹⁴⁷

However, it is doubtful that a covenant not to sue will be construed as a consent to use agreement because the former authorizes activities that would otherwise be infringing, whereas the latter defines certain activities for each of the parties that would *not* infringe on the other party’s rights.¹⁴⁸ Specifically, covenants not to sue lack the basic characteristics of a consent to use agreement: mutual consent to carve out trademark rights in distinct areas, the parties having their own rights in certain areas, and acceptance by one party that the other parties exercise of its rights does not infringe its own.¹⁴⁹ Indeed, in typical covenant-not-to-sue cases, the alleged infringer does not consent to anything and is instead forced to abide by a covenant being proffered as a means to moot the suit at hand.¹⁵⁰ Therefore, it is difficult to construe covenants not to sue as consent to use agreements because the latter’s purpose is to define areas of non-infringement, while a covenant not to sue tolerates some infringement in exchange for the case being rendered moot.¹⁵¹

3. *Naked Licensing*

A third doctrine of trademark law that could apply to a covenant not to sue is a naked license. Under trademark law, a product is not genuine unless it has been manufactured and distributed either by the trademark owner or is under the owner’s quality control.¹⁵² Therefore, when a trademark owner fails to adequately control the quality of its products, there is potential for

145. See Benschar, Kalow & Springut, *supra* note 10, at 1230.

146. See *id.* at 1236.

147. See *id.*

148. See *id.*

149. See *id.*

150. See *id.*

151. See *id.* at 1237.

152. See *id.* at 1231.

consumer deception and confusion.¹⁵³ Consumers may believe that the trademark owner “stands behind the goods,” when in fact they have been made without any type of supervision.¹⁵⁴ A license without adequate quality control is a “naked license” and can be condemned as fraud¹⁵⁵ in addition to leading to the forfeiture of trademark rights.¹⁵⁶

The labeling of a covenant not to sue as a “covenant” as opposed to a “license” lacks any bearing on this analysis, as many courts have construed a variety of agreements and relationships to constitute trademark licenses subject to the naked licensing defense.¹⁵⁷ Thus, a covenant not to sue that is broad enough to moot a case, like the one issued in *Nike*, will most likely give open permission to the alleged infringer to continue manufacturing infringing goods without any quality control whatsoever, as the owner of the mark is no longer the producer nor has any connection to the infringing products present in the marketplace.¹⁵⁸ Therefore, it is possible that a court could interpret a covenant not to sue as a naked license because of the forfeiture of quality control, but it is up to courts to make this parallel analysis and apply the interpretation to the cases before them.

IV. USING A COVENANT NOT TO SUE AS A LITIGATION TOOL

The Court's holding in *Nike* approves of a strategy in which a plaintiff can eliminate the standing of an alleged infringer by issuing a broad covenant not to sue. At first glance, this tactic favors the first mover, who can sue anyone he believes is engaging in infringing behavior. In the rare instance where a competitor fights back with an invalidity counterclaim, the first mover can then issue a broad covenant not to sue to moot the case. To avoid a finding of mootness, the alleged infringer must provide concrete evidence

153. *See id.*

154. *See id.*

155. *See id.* (citing *Dawn Donut Co. v. Hart's Food Stores, Inc.*, 267 F.2d 358 (2d Cir. 1959)); *Societe Comptoir de l'Industrie Cotonniere Etablissements Boussac v. Alexander's Dep't Stores*, 299 F.2d 33 (2d Cir. 1962).

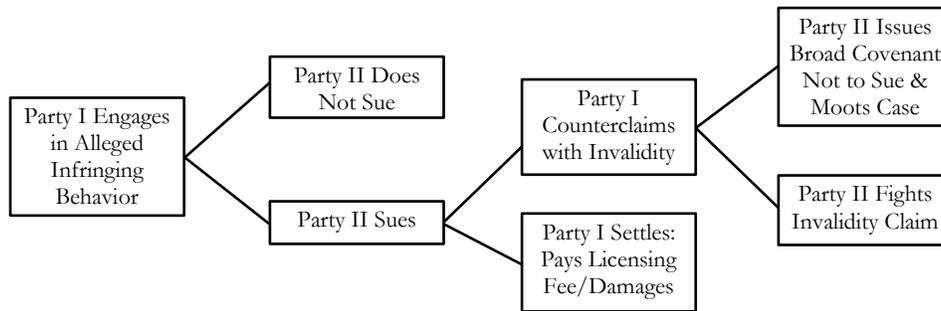
156. *See* *Benschar, Kalow & Springut*, *supra* note 10, at 1231. In addition, according to many authorities naked licensing results in an abandonment of all rights in the trademark and may result in cancellation of registration. *See id.* at 1231–32. The Ninth Circuit found that a licensor's failure to retain actual control over the quality of the trademarked goods resulted in a “naked license,” whereby the trademark is canceled. *See* *FreecycleSunnyvale v. Freecycle Network*, 626 F.3d 509 (9th Cir. 2010).

157. *See* *Benschar, Kalow & Springut*, *supra* note 10, at 1231; *see also* *Exxon Corp. v. Oxxford Clothes, Inc.*, 109 F.3d 1070, 1077 (5th Cir. 1997).

158. *See* *Benschar, Kalow & Springut*, *supra* note 10, at 1231.

of behavior that would fall outside of the covenant if he wishes for the case to continue.¹⁵⁹ Therefore, the first mover has a clear advantage, not only because he can essentially put an end to a case he believes may result in adverse adjudication, but also because a court will require more than just a generalized plan from the alleged infringer. The infringer will need specific, material proof that its products will fall outside the scope of the covenant. This requirement demands hard evidence that many smaller competitors may not have available. Section IV.A discusses recent intellectual property cases that involve one party attempting to use Nike's strategy, while Section IV.B maintains that for a covenant not to sue to be successful it must be irrevocable, unconditional, and so broad that the opposing party cannot engage in infringing activity outside of its scope.

Figure 2: Decision Tree



A. RECENT CASES ATTEMPTING TO USE NIKE'S STRATEGY

Despite the theoretical impression that a covenant not to sue favors the first mover and allows a plaintiff to moot an invalidity counterclaim against its intellectual property, in practice, parties are having a difficult time issuing covenants that meet the requisite broadness to divest the court of its subject matter jurisdiction. Nike's success in the trademark context has not found mirrored achievement in the patent field, as several recent cases have held that the issued covenant not to sue was not unconditional, irrevocable, or sufficiently broad to meet the requirements of the voluntary cessation doctrine.

159. *See generally* *Already, LLC v. Nike, Inc.*, 133 S. Ct. 721 (2013).

In *PerfectVision Manufacturing v. PPC Broadband*,¹⁶⁰ the court held that the patentee's offer of a covenant not to sue did not eliminate the case of actual controversy because the threat of future legal action still loomed.¹⁶¹ PerfectVision is a company that designs, sells, and manufactures coaxial cables and connectors as well as other products. The business was contacted by PPC (a competitor), who wished to inquire about the possibility of PerfectVision distributing a PPC continuity connector.¹⁶² However, when PerfectVision told PPC that it had its own continuity connector, PPC asserted that the connector at issue infringed on PPC's patent and stated that it would pursue legal remedies against PerfectVision.¹⁶³ PerfectVision brought a declaratory judgment action seeking determination that its continuity patent did not infringe on any of PPC's corresponding patents. In response, PerfectVision issued a covenant not to sue¹⁶⁴ and argued that its covenant divested the court of jurisdiction over the declaratory judgment action.¹⁶⁵

However, using *Nike's* rationale,¹⁶⁶ the court found that PPC had not met its burden of showing that it was absolutely clear that it would not resume enforcement efforts in contending that one of PerfectVision's connectors infringed on PPC's patents, as the covenant was neither unconditional nor irrevocable.¹⁶⁷ Furthermore, the court recognized that PPC predicated its covenant on specific assumptions based on a viewing of PerfectVision's *sample* connector, not on actual representations made by PerfectVision to

160. *PerfectVision Mfg. Inc., v. PPC Broadband Inc.*, No. 4:12CV00623, 2013 WL 2553507 (E.D. Ark. June 10, 2013).

161. *Id.*

162. *Id.* at *1.

163. *Id.*

164. *Id.* The covenant more specifically stated:

PPC will release and covenant not to sue PerfectVision for infringement of U.S. Patent Nos . . . based on PerfectVision's manufacture, importation, use, sale and/or offer of the Signaloc connectors as depicted in the illustrations and represented in the product sample. This would not be a license to practice the patents-in-suit, and PPC would explicitly reserve the right to later assert the patents-in-suit against PerfectVision should the design of the Signaloc connectors change in a material way, or should PerfectVision in the future offer some other product that PPC believes infringes one or more of the patents-in-suit.

Id. at *2.

165. *Id.*

166. The court compared Nike's covenant not to sue with PPC's. In *Nike*, Already was free to sell its shoes without any fear of a trademark claim. In contrast, PerfectVision was not free to sell its connector without fear of a patent-infringement claim. *Id.* at *7.

167. *Id.* at *5.

PPC. In addition, the covenant was worded so carefully that it left open the possibility of suit for other patents at issue in the original complaint.¹⁶⁸ Therefore, it was clear to the court that the opportunity for future litigation still loomed large.

In a similar case,¹⁶⁹ AstraZeneca, a pharmaceutical company, issued a covenant not to sue that was neither unconditional nor irrevocable and did not cover the opposing party's suppliers, distributors, and customers.¹⁷⁰ Relying upon the voluntary cessation standard articulated in *Nike*, the court reasoned that AstraZeneca had the "formidable burden" of showing that it "could not reasonably be expected" to resume its enforcement efforts against Apotex, a competitor.¹⁷¹ However, AstraZeneca's covenant was considerably narrower than Nike's and, more importantly, only covered the competitor's Abbreviated New Drug Application ("ANDA"). Apotex amended its ANDA after the issuance of the covenant, and the covenant only provided protection for the application as it existed on the original filing date and nothing more.¹⁷² Therefore, it was clear that Apotex's application fell outside of the scope of the covenant, and the company could either pursue arguably illegal behavior in launching its product or completely abandon the project altogether.¹⁷³ Based on their analysis under *Nike*, the court concluded that AstraZeneca failed to show that it could not reasonably be expected to resume its enforcement efforts against Apotex.¹⁷⁴

In contrast to the above cases, Monsanto successfully argued that its representations to the Organic Seed Growers Association should be construed as a covenant not to sue extensive enough to defeat the appellant's declaratory judgment claims.¹⁷⁵ Appellants, a coalition of farmers, seed sellers,

168. *Id.* In addition the court believed that there was a high possibility of PPC exploiting the conditional nature of the covenant not to sue. *Id.* at *8.

169. *AstraZeneca LP v. Breath Ltd.*, No. 08-1512, 2013 WL 2404167 (D.N.J. May 31, 2013), *aff'd*, Nos. 2013-1312, 2013-1353, 2013 WL 5813759 (Fed. Cir. Oct. 30, 2013).

170. The covenant stated in relevant part:

AstraZeneca hereby covenants not to sue [Apotex] for infringement of the Kit Claims, *as they now read* . . . as described in Apotex's Abbreviated New Drug Application . . . *as approved and as it existed on March 30, 2009* . . . The covenant does *not reach* other products or *changes* to Apotex's budesonide inhalation suspension . . . or uses of such products, as described in Apotex's ANDA No. 78-202

Id. at *3.

171. *Already, LLC v. Nike, Inc.*, 133 S. Ct. 721, 727 (2013).

172. *AstraZeneca*, 2013 WL 2404167, at *3.

173. *Id.* at *4.

174. *Id.*

175. *Organic Seed Growers and Trade Ass'n v. Monsanto Co.*, 718 F.3d 1350 (Fed. Cir. 2013). The fact that the promises were not explicitly a covenant not to sue did not matter to

and agricultural organizations, sought declaratory judgment of non-infringement and invalidity with respect to twenty-three patents owned by Monsanto,¹⁷⁶ a chemical and agricultural biotechnology company. However, Monsanto “made binding assurances that it would not take legal action against growers whose crops might inadvertently contain traces of Monsanto biotech genes,”¹⁷⁷ and appellants could not allege any circumstance that placed them beyond the scope of those assurances.¹⁷⁸ Although Monsanto did not expressly issue a covenant not to sue, its promise was equally effective because it was an explicit commitment to avoid legal action,¹⁷⁹ and the company maintained the position throughout litigation that they were unaware of any circumstances that would give rise to any claim for infringement.¹⁸⁰ The facts and representations, as made by the appellants, made any fear of suit or other action unreasonable.¹⁸¹ Therefore, the court concluded that taken together, Monsanto’s representations unequivocally eliminated a controversy.¹⁸²

B. A SUCCESSFUL COVENANT IS UNCONDITIONAL, IRREVOCABLE, AND BROAD

These three cases, along with the *Nike* decision, illustrate the factors—revocability, conditionality, and breadth—that play a major role in shaping the successfulness of a covenant not to sue in divesting the court of its jurisdiction. In *Nike* and *Monsanto* the covenants at issue were irrevocable and unconditional,¹⁸³ whereas the covenants in *PerfectVision* and *AstraZeneca* could be revoked and were conditioned on the plaintiff acting within certain

the court, as the representations Monsanto made were binding as a matter of judicial estoppel. *Id.* at 1358.

176. *Id.*

177. *Id.* at 1352.

178. *Id.* at 1357. Appellants could not allege any contamination over the one percent threshold. *Id.* at 1359.

179. *Id.* at 1357–58. Monsanto published the following statement on its website: “[i]t has never been, nor will it be Monsanto[s] policy to exercise its patent rights where trace amounts of our patented seeds or traits are present in farmer’s fields as a result of inadvertent means.” *Id.*

180. *Id.* at 1358.

181. As maintained throughout the case, “Monsanto . . . does not assert and has no intention of asserting patent-infringement claims against your clients. You represent that ‘none of your clients intend to possess, use or sell any transgenic seed, including any transgenic seed potentially covered by Monsanto’s patents.’” *Id.*

182. *Id.* at 1359.

183. *Already, LLC v. Nike, Inc.*, 133 S. Ct. 721, 727 (2013); see generally *Organic Seed Growers*, 718 F.3d 1350 (Fed. Cir. 2013).

narrowly prescribed boundaries.¹⁸⁴ Nike's covenant explicitly stated that it was making an "unconditional" and "irrevocable" promise,¹⁸⁵ and Monsanto promised that it had no intention of asserting patent infringement claims against any of the parties involved in the suit if trace amounts of its products were found on the plaintiffs' plants.¹⁸⁶ On the other hand, AstraZeneca's covenant not to sue Apotex was conditioned on Apotex's ANDA being identical to the one that was approved before the covenant was issued,¹⁸⁷ and PerfectVision's covenant purposefully left open the possibility of future suit against PPC.¹⁸⁸

In addition, Nike's covenant disallowed the company from making any claim or demand against Already; protected Already's customers and distributors; and covered past, current, and future products, including any colorable imitations.¹⁸⁹ It seems then, that a successful covenant must include future activities based on any past designs. However, despite the breadth of Nike's covenant, Monsanto's promise to not sue farmers whose crops contained trace amounts of its seed was rather limited, as its disclaimer did not clarify whether or not the company would assert its patents against a grower who inadvertently used *greater* than trace amounts of modified seed.¹⁹⁰ Despite this limitation, the court focused on the fact that the appellants could not make any allegations that they were engaging in activities that placed them outside the scope of Monsanto's disclaimer.¹⁹¹ On the other hand, PerfectVision's covenant only covered the Signaloc connectors,¹⁹² and AstraZeneca's covenant only covered Apotex's ANDA.¹⁹³ Therefore, the breadth of a covenant must be read in context with the specific facts of a case, and so long as the promise not to sue is irrevocable and unconditional, it will most likely be successful in mooting the case at hand.

184. *AstraZeneca LP v. Breath Ltd.*, No. 08-1512, 2013 WL 2404167, at *3 (D.N.J. May 31, 2013), *aff'd*, Nos. 2013-1312, 2013-1353, 2013 WL 5813759 (Fed. Cir. Oct. 30, 2013).

185. *Nike*, 133 S. Ct. at 728.

186. *Organic Seed Growers*, 718 F.3d at 1357–58.

187. *AstraZeneca*, 2013 WL 2404167, at *3.

188. *PerfectVision Manufacturing v. PPC Broadband*, No. 4:12CV00623, 2013 WL 2553507, at *8 (E.D. Ark. June 10, 2013).

189. *Nike*, 133 S. Ct. at 721.

190. *See Organic Seed Growers*, 718 F.3d at 1357.

191. *Id.* In addition there was no allegation that contamination already did not exceed the one percent threshold, nor did appellants take any concrete steps that would place them outside of the binding disclaimer. *Id.*

192. *See supra* not 164 and accompanying text.

193. *AstraZeneca LP v. Breath Ltd.*, No. 08-1512, 2013 WL 2404167, at *3 (D.N.J. May 31, 2013), *aff'd*, Nos. 2013-1312, 2013-1353, 2013 WL 5813759 (Fed. Cir. Oct. 30, 2013).

V. CONCLUSION

The *Nike* decision made clear that a covenant not to sue has the ability to moot a case if an intellectual property owner can overcome the heavy burden of the voluntary cessation doctrine.¹⁹⁴ Courts should make a careful evaluation of the totality of the circumstances in order to guarantee that larger, more powerful corporations are not unduly taking advantage of smaller competitors. Furthermore, trademark owners should be aware that such a covenant could not only affect the future acts of the defendant but also the validity of its trademark, as a sufficiently broad covenant may be construed as a naked license or an admission that there is no confusion from any present uses of the mark.¹⁹⁵ It is impossible for small companies to challenge a covenant not to sue unless they can show that they have concrete plans that constitute infringement outside of the covenant. Trying to prove continued standing will most likely lead to an incursion of increased costs, which many companies may not be willing to take on.

Lastly, as seen in the patent context, issuing a covenant not to sue is a trade-off that must be cautiously calculated and evaluated to make sure that it is the most efficient solution available that will accomplish a party's goals. In effect, issuing a successful covenant, which should be as broad as possible, irrevocable, and unconditional, is a difficult endeavor that may limit an intellectual property owner's ability to snuff out and eliminate competitors with similar trademarks or patents. Taking this risk is a question all companies must deal with if the situation presents itself in the future.

194. See *supra* Section II.B.

195. See Benschar, Kalow & Springut, *supra* note 10, at 1239–40.

MUCH ADO ABOUT NOTHING: ICANN'S NEW GTLDS

Daniela Michele Spencer[†]

On October 23, 2013, the president of the Generic Domain Division of the Internet Corporation of Assigned Names and Numbers (“ICANN”) announced “the biggest change to the Internet since its inception.”¹ After eight years of research, forty-seven different requests for public comments, nearly 2,500 public comments, fifty-five advisory documents, and seven versions of the New gTLD Applicant Guidebook, ICANN began its highly anticipated generic top-level domain (“gTLD”) rollout with four new non-Latin language scripts.² According to ICANN, the creation of new gTLDs will “pav[e] the way for increased consumer choice by facilitating competition among registry service providers.”³

Internet Protocol (“IP”) addresses serve as the directory for companies, organizations, and other entities on the Internet.⁴ Those IP addresses are randomly generated numbers that are difficult for users to remember. The domain name system (“DNS”) solves this problem by replacing the numbers with alphanumeric domain names that are usually made up of common words or phrases. Instead of a user being forced to remember the series of numbers to link him to the particular computer that he intends to access, he must only remember the domain name.⁵ A domain name—for example, *www.google.com*—is organized by labels or levels, which are divided by periods.⁶ The rightmost label—for example, *.com*—is the top-level domain, which is

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1. Press Release, Internet Corp. for Assigned Names and Numbers, First New Generic Top-Level Domains Delegated (Oct. 23, 2013), *available at* <http://www.icann.org/en/news/press/releases/release-23oct13-en>.

2. *Id.*

3. *Frequently Asked Questions*, ICANN: NEW GENERIC TOP-LEVEL DOMAINS, <http://newgtlds.icann.org/en/applicants/customer-service/faqs/faqs-en> (last visited Jan. 26, 2014) [hereinafter *Frequently Asked Questions*].

4. *See Glossary*, INTERNET CORP. FOR ASSIGNED NAMES & NUMBERS, <http://www.icann.org/en/about/learning/glossary> (last visited Jan. 26, 2014) [hereinafter *Glossary*].

5. *See id.*

6. *See* Christopher G. Clark, *The Truth in Domain Names Act of 2003 and a Preventative Measure to Combat Typosquatting*, 89 CORNELL L. REV. 1476, 1483 (2004).

the highest level of domain on the Internet.⁷ Each label to the left of the top-level domain—for example, *google*—represents a subdivision or a subdomain.⁸

At the apex of the DNS is a set of thirteen root servers, which lists the IP addresses of the computers containing the zone files.⁹ Below these servers are computers that hold the top-level domain zone files; these computers list the IP addresses of the name servers for each second-level domain name that the computer controls.¹⁰ If a user looks for a specific IP address, then his computer sends the request to the local DNS servers for its location.¹¹ If the local servers cannot find the location, they transfer the query up the line.¹² Therefore, the ability to modify the root zone files in the root servers is a huge power, because if the file is modified, the IP address cannot be found.¹³

Many commentators have advocated the introduction of substantially more gTLDs in order to combat the allegedly anticompetitive policies of ICANN.¹⁴ Previously, ICANN had limited the number of gTLDs and thereby created an artificial scarcity, particularly under the gTLD *.com*.¹⁵ New companies were thus prevented from entering the marketplace because most domains have already been registered.¹⁶

Critics like Professors Froomkin and Lemley have suggested that the limited number of gTLDs owned by the registrar VeriSign, and essentially controlled by ICANN, may actually violate antitrust law.¹⁷ Professors

7. *Id.*

8. In this case, *google* would be the second-level domain name.

9. See Jonathan Weinberg, *ICANN and the Problem of Legitimacy*, 50 DUKE L.J. 187, 197 (2000).

10. *See id.*

11. *See id.*

12. *See id.*

13. The simplest analogy to the root servers would be a global post office. An individual would post a letter and add an address to it, which is similar to an IP address. If it were a local address in a small town, the local post office would be able to find it without any problems. However, if this were a letter being sent from Berkeley, California to Kiev, Ukraine, it would be sent to a large number of post offices that ultimately would be able to identify where to send the letter. However, if the maps used by the post office were modified, the letter would return to the sender because the address was not recognized, similar to an IP address that could not be found because of a modified root zone file.

14. *See infra* Part III.

15. *See infra* Part III.

16. A. Michael Froomkin, *Wrong Turn in Cyberspace: Using ICANN to Route Around the APA and the Constitution*, 50 DUKE L.J. 17, 22 (2000) (internal citation omitted) (“In particular, as attractive domain names in *.com* began to become scarce, disputes over attractive names became increasingly common . . .” (internal citation omitted)).

17. See A. Michael Froomkin & Mark A. Lemley, *ICANN and Antitrust*, 2003 U. ILL. L. REV. 1, 52–66 (2003); see also Justin T. Lepp, Note, *ICANN's Escape from Antitrust Liability*, 89 WASH. U.L. REV. 931, 938–48 (2012). See generally Paul J. Cambria, Jr., ICANN, *The “xxx”*

Froomkin and Lemley advised creating more gTLDs to prevent ICANN from controlling a large share of the market.¹⁸ In contrast, Esther Dyson, founding chairwoman of ICANN, stated that the new gTLDs system was similar to “creating a business, like derivatives on Wall Street, that has no value You can charge people for it, but you are contributing nothing to the happiness of humanity.”¹⁹

This Note examines ICANN's gTLD policies, focusing on potential anticompetitive effects. It contends that, even though expansion of gTLDs would likely address Professor Froomkin's and Lemley's concerns about centralized control of IP addresses, the domain name scarcity issue either does not exist under the present system or is greatly exaggerated.²⁰ The former limitations on gTLDs did not, therefore, rise to the level of antitrust violations. Moreover, this Note contends that creating more gTLDs will likely produce adverse consequences.²¹ On balance, ICANN's gTLD expansion will likely cause more harm than good, especially since many companies will expend recourses without any tangible results.

Part I of this Note summarizes the Internet's relatively short but tumultuous history with a focus on ICANN and the domain name system, and then discusses the current state of events in the new gTLD regime. Part II addresses the possible antitrust problems embedded in the gTLD system. Part III analyzes the economic effects of adding new gTLDs to the current regime. Part IV advises business owners in the wake of the new gTLD regime.

I. BACKGROUND

A. THE INTERNET

The Internet consists of a network of interconnected computer systems that sends and receives information. The modern Internet actually began with the “packet switching” research funded by the United States

Debate, and Antitrust: The Adult Internet Industry's Next Challenge, 23 STAN. L. & POL'Y REV. 101, 102 (2012) (arguing that ICANN's overarching control over gTLDs and collusion with the ICM Registry “curtail[ed] a particular segment of protected market activity,” which constituted a violation of the Sherman Act).

18. Froomkin & Lemley, *supra* note 17, at 52.

19. Natasha Singer, *When You Can't Tell the Suffixes Without a Scorecard*, N.Y. TIMES, Aug. 18, 2013, at BU3.

20. *See infra* Part III.

21. *Infra* Part III.

Department of Defense in the 1960s.²² The National Science Foundation (“NSF”), a federal agency that advances research and education in all the non-medical fields of science and engineering, provided funding to find more powerful technology and connect multiple networks of computers.²³ In 1990, when the Internet had grown beyond its humble origins as a relatively small network of computers, NSF contracted with a for-profit organization called Network Solutions, Inc. (“NSI”) to control the DNS.²⁴ In 1992, the United States granted the NSF exclusive control of the root domain system²⁵ of computers, and the contractor, NSI, began charging fees to register domain names on the root server.²⁶ Soon after, other companies established a network of alternative servers to provide a competing registry with NSI’s key root server.²⁷

By 1994, there were disputes between the engineers at the NSF and the managers at NSI over the large number of domain names that NSI was granting.²⁸ Tired of the disputes, the Department of Commerce issued a White Paper suggesting that certain individuals from the private sector take charge of the DNS.²⁹ In response, a group of scientists led by Dr. Jon Postel created ICANN.³⁰ Henceforth, the U.S. Department of Commerce charged ICANN with controlling all policy in the future of the DNS.³¹ Nevertheless,

22. See Christopher M. Bruner, *States, Markets, and Gatekeepers: Public-Private Regulatory Regimes in an Era of Economic Globalization*, 30 MICH. J. INT’L L. 125, 149 (2008).

23. See Weinberg, *supra* note 9, at 193.

24. See Bruner, *supra* note 22, at 153–54.

25. NSF was only granted exclusive use of the key root server. Normally, users send their DNS queries to the name server that references the key root zone. However, that is not necessary. Instead, users can require that their computers go to completely separate root servers which reference a completely different set of domains. See Weinberg, *supra* note 10, at 198. Using a Harry Potter/postal service analogy, this would be similar to sending a letter to Diagon Alley. If an individual uses the right postal system (for example, one comprised entirely of owls), the letter will get to the right recipient. However, the standard postal service will not know what to make of the address. *Owl Post*, HARRY POTTER WIKIA, http://harrypotter.wikia.com/wiki/Owl_post (last visited Jan. 26, 2014).

26. See Weinberg, *supra* note 9, at 200–01.

27. See *Rogue Domains Revolt*, CNET (Mar. 4, 1997, 4:15 PM), http://news.cnet.com/Rogue-domains-revolt/2100-1023_3-275957.html.

28. See Zach Tomaszewski, *The Domain Name System: At the Root of It* (May 8, 2001) (unpublished student paper, University of Hawaii), available at <http://www2.hawaii.edu/~ztomasze/dnspaper.html>.

29. Management of Internet Names and Addresses, 63 Fed. Reg. 31,741, 31,744 (June 10, 1998). See also Froomkin & Lemley, *supra* note 17, at 10.

30. See Froomkin & Lemley, *supra* note 17, at 10.

31. See *id.* at 8–9.

the U.S. government still maintains a large amount of control over the DNS.³²

The goals of ICANN in managing the DNS are to preserve the operational stability of the Internet, to promote competition, to develop policies to ensure bottom-up coordination amongst entities, and to ensure that there is a broad representation of the global Internet community.³³ ICANN operates the Internet Assigned Numbers Authority (“IANA”)³⁴ and is in charge of delegating the management of top-level domains to third-party organizations called “registry operators,” each of which in turn operates the authoritative domain name database for its respective top-level Domain (“TLD”).³⁵ VeriSign, for example, operates the gTLD of *.com*, so all domain names that end with *.com* must register with VeriSign.³⁶

Because of the sheer number of domain names, the registry operators contract with organizations called registrars, such as *godaddy.com* or *namecheap.com*.³⁷ Those registrars sell domain names to consumers, and there are hundreds of registrars for each registry operator.³⁸ Although the registrar operators wield a large amount of power by controlling which registrars enter the market, ICANN has a significant amount of control over the domain name market place because it is able to choose the small amount of registry operators, and it has the power to disqualify a registrar.³⁹

32. The pact between the United States and ICANN, called the Affirmation of Commitment, provides for periodic reviews of ICANN’s activities by the Governmental Advisory Activity and other members of the ICANN community. *See infra* Section II.A.2. Whether or not an entity other than the U.S. government should control the DNS (which is an international system) is the subject of much debate. *See* Philip S. Corwin, *ICANN@15: Born in the USA—But Will It Stay?*, CIRCLEID (Nov. 15, 2013), http://www.circleid.com/pdf/ICANN_at_15_Born_in_the_USA_But_will_it_Stay.pdf.

33. *See* Memorandum of Understanding Between the U.S. Department of Commerce and Internet Corporation for Assigned Names and Numbers (Nov. 25, 1998), *available at* <http://www.icann.org/general/icann-mou-25nov98.htm>.

34. IANA is “responsible for the global coordination of the DNS Root, IP addressing, and other Internet protocol resources.” INTERNET ASSIGNED NUMBERS AUTHORITY, <https://www.iana.org> (last visited Feb. 7, 2014).

35. *See* Kathleen E. Fuller, *ICANN: The Debate over Governing the Internet*, 2001 DUKE L. & TECH. REV. 2, 5 (2001). A top-level domain includes both gTLDs (generic top-level domains like *.com*) and ccTLD’s (country code top-level domains like *.uk*).

36. *See .com Registry Agreement*, INTERNET CORP. FOR ASSIGNED NAMES & NUMBERS (Dec. 1, 2012), <https://www.icann.org/en/about/agreements/registries/com>.

37. *See Glossary*, *supra* note 4.

38. *See id.*

39. *See* Froomkin & Lemley, *supra* note 17, at 7.

B. GENERIC TOP-LEVEL DOMAINS

By 1984, the U.S. government had established six general-purpose domains: *.com* (for-profit businesses), *.edu* (U.S. education institutions), *.gov* (U.S. government entities), *.mil* (U.S. military), *.org* (non-profit organizations), and *.net* (general umbrellas sites).⁴⁰ Four years later, in response to NATO's request, the TLD *.int* was added for organizations created by a treaty between two nations.⁴¹

In 1995, the head of IANA created an Internet draft that established committees to create new gTLDs.⁴² In 1997, a new organization called the International Ad Hoc Committee recommended seven new gTLDs: *.arts*, *.firm*, *.info*, *.nom*, *.rec*, *.store*, and *.web*.⁴³ However, the gTLDs were abandoned when ICANN was created.⁴⁴ In 2000, ICANN received proposals for new gTLDs, and between 2001 and 2004, seven gTLDs were activated: *.biz* (generic TLD to provide relief for *.com*), *.info* (open TLD), *.museum* (verified legitimate museum), *.name* (individuals or fictional characters), *.coop* (cooperatives), *.pro* (licensed or certified professionals), and *.aero* (air-travel related entities).⁴⁵

In 2004, ICANN allowed applications for more top-level domains and eventually approved *.asia* (entities based in Asia, Australia, or the Pacific), *.cat* (Catalan-related site), *.jobs* (established companies with jobs to advertise), *.mobi* (mobile devices), *.post* (postal administrations), *.tel* (contact information of the DNS), and *.travel* (travel related entity).⁴⁶ In 2011, *.xxx* (pornographic)

40. Despite their original purpose, *.com*, *.net*, and *.org* are now open for use for any purpose. See Chris Hoffman, *The Difference Between .com, .net, .org and Why We're About to See Many More Top-Level Domains*, HOW-TO GEEK (Oct. 15, 2012), <http://www.howtogeek.com/126670/the-difference-between-.com-.net-.org-and-why-were-about-to-see-many-more-top-level-domains>.

41. See Rodney A. Myer, Comment, *Domains Without Borders: Reconciling Domain Name Dispute Resolution Policies and Trademark Rights Between the United States and the Nations of the European Union*, 20 PENN ST. INT'L L. REV. 415, 417 (2002).

42. J. POSTEL, INTERNET ENG'G TASK FORCE, NEW REGISTRIES AND THE DELEGATION OF INTERNATIONAL TOP-LEVEL DOMAINS (June 1996), available at <http://tools.ietf.org/html/draft-postel-iana-itld-admin-01>. An Internet draft is a working document of the Internet Engineering Task Force. *Id.*

43. See Ira S. Nathenson, Comment, *Showdown at the Domain Name Corral: Property Rights and Personal Jurisdiction over Squatters, Poachers and Other Parasites*, 58 U. PITT. L. REV. 911, 983 (1997).

44. See Barbara A. Solomon, *Domain Name Disputes: New Developments and Open Issues*, 91 TRADEMARK REP. 833, 834 (2001).

45. See *id.*

46. ICANN-Accredited Registrars, INTERNET CORP. FOR ASSIGNED NAMES & NUMBERS, <http://www.icann.org/registrar-reports/accredited-list.html> (last visited Jan. 26, 2013).

was finally approved despite ICANN's initial rejection.⁴⁷ All of the TLDs established after 2003 are sponsored TLDs, which means that a specific community sponsors the domains and that registrants of each domain must be registered members of that community.⁴⁸

On June 26, 2008, ICANN announced that it would begin an unprecedented process for naming gTLDs in order to introduce more of them into practice.⁴⁹ In June 2011, ICANN launched the new program with the goals of "enhancing competition and consumer choice, and enabling the benefits of innovation via the introduction of new gTLDs, including both new ASCII and internationalized domain name (IDN) top-level domains."⁵⁰ When the application window opened on January 12, 2012, ICANN had collected almost two thousand applications for new gTLDs.⁵¹ Applications are processed and evaluated in a random order determined by lottery.⁵² The ICANN staff processes the applications, and expert, independent third-party evaluators appraise them.⁵³ In March 2013, ICANN began releasing the results of its initial evaluation.⁵⁴ Those applications that pass the initial screening and have no objections are eligible to proceed to contracting.⁵⁵ Following this process, ICANN will delegate the new gTLDs.⁵⁶

ICANN has explained that creating a new gTLD will allow the operators of the gTLD to increase control by setting the rules and prices for those registering the gTLD, and to create an ongoing revenue stream since customers will be renewing their domain names.⁵⁷ ICANN has also

47. See Nafees Uddin, *Stymieing Controversy Over Generic Top-Level Domains (gTLDs) and Other Internet Governance Decisions with Content Neutrality*, 11 SEATTLE J. SOC. JUST. 813, 836–37 (2013). For more information about the xxx TLD history, see *infra* notes 107–108 and accompanying text.

48. See Karl M. Manheim & Lawrence B. Solum, *An Economic Analysis of Domain Name Policy*, 25 HASTINGS COMM. & ENT. L.J. 359, 455 (2003).

49. *Biggest Expansion in gTLDs Approved for Implementation*, INTERNET CORP. FOR ASSIGNED NAMES & NUMBERS (June 26, 2008), <http://www.icann.org/en/news/announcements/announcement-4-26jun08-en.htm>.

50. *About the Program*, ICANN: NEW GENERIC TOP-LEVEL DOMAINS, <http://newgtlds.icann.org/en/about/program> (last visited Jan. 26, 2014).

51. *See id.*

52. *See id.*

53. *See id.*

54. *See id.*

55. *See id.*

56. *See Frequently Asked Questions*, *supra* note 4. gTLDs are expected to be delegated within one year of signing a registry agreement with ICANN. *Id.*

57. *Benefits and Risks of Operating a New GTLD*, ICANN: NEW GENERIC TOP-LEVEL DOMAINS, <http://newgtlds.icann.org/en/about/benefits-risks> (last visited Jan. 26, 2014) [hereinafter *Benefits and Risks*].

acknowledged that establishing a new gTLD includes numerous risks.⁵⁸ The applicant must pay \$185,000 for the evaluation fee, pay for ongoing registry operational costs, and “demonstrate sufficient financial depth to keep the registry fully operational for at least three years even if the [applicant’s] business plan does not achieve its objectives.”⁵⁹ ICANN has recognized that operating a new gTLD could lead to a loss of investment if the string⁶⁰ does not pass the evaluation process due to competition with similar strings.⁶¹

C. DISPUTE RESOLUTION SYSTEM

The creation of large numbers of new gTLDs increases the possibility of disputes, including those in which trademark owners allege that gTLD names infringe on their intellectual property. To address these concerns, ICANN has introduced four possible ways that trademark owners can protect their marks from potentially overlapping gTLDs: “legal rights objection, string confusion objection, community objection, and limited public interest objection.”⁶²

First, a company may raise a legal rights objection to a domain name if the company has registered its trademark and thereby owns an intellectual property right to the name.⁶³ Companies must file legal rights objections with the World Intellectual Property Organization (“WIPO”) Arbitration and Mediation Center.⁶⁴ WIPO charges an administrative fee of \$2,000 and an \$8,000 fee for the use of a single expert panel, and decides if the objection should be upheld or denied based on an eight-factor non-exclusive test.⁶⁵

58. *Id.*

59. *Id.*

60. A string is a sequence of characters comprising an applied-for gTLD. *See Glossary, supra* note 4.

61. *Benefits and Risks, supra* note 57.

62. *See* Brandon Marsh, Note, *ICANN’T Help Myself: Beneficial Adjustments to the New Generic Top-Level Domain Name Expansion Process*, 95 J. PAT. & TRADEMARK OFF. SOC’Y 195, 206 (2013).

63. *See* WIPO ARBITRATION & MEDIATION CTR., END REPORT ON LEGAL RIGHTS OBJECTION PROCEDURE 2013, at 7 (Dec. 2013), <http://www.wipo.int/export/sites/www/amc/en/docs/lroreport.pdf>.

64. *See id.*

65. *See, e.g.,* Coach, Inc. v. Koko Island, LLC, No. LRO2013-0002 (WIPO Arbitration & Mediation Center Aug. 14, 2013), *available at* <http://www.wipo.int/export/sites/www/amc/en/domains/lro/docs/lro2013-0002.pdf>. The eight factors are: (1) similarity of the mark, (2) trademark owner’s use is bonafide, (3) public recognition of the mark, (4) applicant’s intent in applying for the gTLD, (5) applicant’s bonafide use of the mark, (6) applicant’s IP rights in mark, (7) applicant is commonly known by the mark, and (8) likelihood of confusion. *See* ICANN, GTLD APPLICANT GUIDEBOOK 3.19 (2012), *available at* <http://newgtlds.icann.org/en/applicants/agb> [hereinafter GUIDEBOOK]. For

Second, if a company possesses either a confusingly similar pre-existing top-level domain or applied for the same or similar gTLD in the same application period, it can file a string confusion objection with the International Centre for Dispute Resolution (“ICDR”).⁶⁶ The ICDR charges a \$2,750 filing fee per party, per objection, and if the companies do not reach a settlement before the dispute resolution period, there is also a service fee of \$1,250.⁶⁷

Third, a delineated community can also file an objection with the International Center of Expertise of the International Chamber of Commerce (“ICC”) if the domain name is identical to an established community to which the objector belongs.⁶⁸ Finally, a group can file a limited public interest objection if it objects because the gTLD offends generally accepted norms of morality and public order. This type of objection is filed with the ICC.⁶⁹ Both the public interest objection and the community objection require non-refundable filing fees of up to \$5,000.⁷⁰

In all of these instances, the burden of proof lies with the objecting party.⁷¹ If an objection is successful, then the new gTLD will not be given because the application cannot be further reviewed.⁷² For the party applying for a new gTLD, such a determination is final because there is no appeal in the review stage of the process. However, the company seeking a new gTLD can apply again in later rounds.⁷³

II. ANTITRUST ANALYSIS

Before the advent of the new gTLDs, several scholars had contended that ICANN restrained competition in the domain name space by restricting

example, The DirecTV Group objected to Dish DBS’s registration of the domain name *.direct*, and the objection was upheld; in contrast Coach, Inc. objected Donuts Inc.’s registration of *.coach*, and the objection was denied. *Legal Rights Objections Under ICANN’s New gTLD Program*, WIPO, <http://www.wipo.int/amc/en/domains/lro> (last visited Feb. 7, 2014.)

66. *Objection and Dispute Resolution*, ICANN: NEW GENERIC TOP-LEVEL DOMAINS, <http://newgtlds.icann.org/en/program-status/odr> (last visited Jan. 26, 2014).

67. INT’L CTR. FOR DISPUTE RESOLUTION, FEES AND COSTS FOR STRING CONFUSION OBJECTIONS (May 2012), available at <http://newgtlds.icann.org/en/program-status/odr>.

68. GUIDEBOOK, *supra* note 65, at 3.7–3.8.

69. *Introduction to ICANN New gTLD Dispute Resolution*, INT’L CHAMBER OF COMMERCE, <http://www.iccwbo.org/products-and-services/arbitration-and-adr/expertise/introduction-to-icann-new-gtld-dispute-resolution> (last visited Jan. 26, 2014).

70. GUIDEBOOK, *supra* note 65, at 1.45.

71. *Id.* at 3.18.

72. *Id.* at 3.9.

73. *Id.* at 3.25.

the number of generic top-level domains.⁷⁴ First, there was no competition between companies for the registry function in the existing gTLDs.⁷⁵ This lack of competition allowed a limited number of companies (chosen by ICANN) to maintain control over the DNS and led to a number of lawsuits.⁷⁶ Second, consumers had a limited choice for domain names. According to this line of argument, the limited number of gTLDs created an artificial scarcity of domain names.⁷⁷ It is possible that these types of arguments inspired the creation of new gTLDs to combat the antitrust concerns.⁷⁸

Section II.A discusses the federal antitrust section under which critics have accused ICANN of hindering competition. Section II.B considers ICANN's liability under Section 2 of the Sherman Act as it relates to registries and the gTLD market. Section II.C analyzes ICANN's liability under Section 1 of the Sherman Act as it relates to the contracts signed between ICANN and the registries, especially VeriSign.

A. ANTITRUST LAW

1. *The Sherman Act*

The Sherman Act⁷⁹ seeks to protect consumers from arrangements that would unfairly restrain competition.⁸⁰ Under Section 1 of the Act, “[e]very contract, combination . . . , or conspiracy, in restraint of trade or commerce . . . , is declared to be illegal.”⁸¹ Courts have struck down horizontal

74. See Froomkin & Lemley, *supra* note 17, at 52; see also Lily Blue, Note, *Internet and Domain Name Governance: Antitrust Litigation and ICANN*, 19 BERKELEY TECH. L.J. 387, 393 (2004) (“Critics have noted that some of ICANN’s policies seemingly hinder competition, especially in providing new registries and new gTLDs in the domain name market.”); Brandon Marsh, *supra* note 62, at 219 (“ICANN has decided to implement the new gTLD expansion as a way to increase innovation within the DNS and decrease the domain name scarcity currently occurring in .com.”); Lepp, *supra* note 17, at 947 (“[T]he New gTLD Program represents a substantial step toward increasing competition in the domain name market.”).

75. Jay P. Kesan & Rajiv C. Shah, *Fool Us Once Shame on You—Fool Us Twice Shame on Us: What We Can Learn from the Privatizations of the Internet Backbone Network and the Domain Name System*, 79 WASH. U. L.Q. 89, 198 (2001).

76. See, e.g., *Name.space, Inc. v. Internet Corp. for Assigned Names & Numbers*, No. CV 12-8676, 2013 WL 2151478 (C.D. Cal. Mar. 4, 2013); *Verisign, Inc. v. Internet Corp.*, No. CV 04-1292, 2004 WL 1945561 (C.D. Cal. May 18, 2004).

77. For a fuller explanation, see generally Froomkin & Lemley, *supra* note 17.

78. See *Frequently Asked Questions*, *supra* note 3.

79. Sherman Act of 1890, ch. 647, 26 Stat. 209 (current version at 15 U.S.C. §§ 1–7 (2012)).

80. See *Spectrum Sports, Inc. v. McQuillan*, 506 U.S. 447 (1993).

81. 15 U.S.C. § 1.

agreements (in which competitors in the same level of the supply chain agree to fix prices or allocate territories amongst themselves), vertical agreements (in which manufacturers and distributors agree to fix prices or divide territories), refusals to deal (in which companies boycott working with competitors), tying agreements (in which a seller of a product conditions the sale on a buyer's promise to buy an unrelated product), and exclusive dealing agreements (in which a supplier agrees to sell all or a significant portion of its output to a specific buyer and vice versa).⁸² Some agreements, such as horizontal price fixing or horizontal territory allocation, are considered per se illegal, and may not be rebutted based on a lack of market power or on effects on competition.⁸³ However, rule-of-reason analysis is used as the default for most other types of agreements, which asks whether the challenged practice promotes or suppresses market competition. The court determines if the violation unreasonably restrains trade and must consider facts particular to that market and the history of the alleged violation.⁸⁴

Whereas Section 1 of the Sherman Act covers agreements amongst multiple parties, Section 2 prohibits anticompetitive conduct of a single party in a particular market: "Every person who shall monopolize, or attempt to monopolize . . . any part of the trade or commerce . . . shall be deemed guilty of a felony."⁸⁵ There are two elements that a plaintiff must prove to establish a Section 2 violation: "(1) the possession of monopoly power in the relevant market and (2) the willful acquisition or maintenance of that power as distinguished from growth or development as a consequence of a superior product, business acumen, or historic accident."⁸⁶

Possession of market power in a relevant market is used as a proxy for possession of monopoly power, which is the first prong of the Section 2 analysis.⁸⁷ The relevant market is defined by both a product and a geographic dimension.⁸⁸ In determining the relevant product market, courts have looked at the extent to which the defendant's product is interchangeable in use with "alternative products" and the degree of cross-elasticity of demand⁸⁹ between

82. See Mark A. Lemley & Christopher R. Leslie, *Categorical Analysis in Antitrust Jurisprudence*, 93 IOWA L. REV. 1207, 1219 (2008).

83. See, e.g., *United States v. Socony-Vacuum Oil Co.*, 310 U.S. 150, 223 (1940).

84. See *Continental T. V., Inc. v. GTE Sylvania Inc.*, 433 U.S. 36, 49 (1977).

85. See 15 U.S.C. § 2.

86. *United States v. Grinnell Corp.*, 384 U.S. 563, 570–71 (1966).

87. See *T. Harris Young & Assocs., Inc. v. Marquette Elecs., Inc.*, 931 F.2d 816, 823 (11th Cir. 1991).

88. See *id.*

89. Cross-elasticity of demand calculates how much the demand for a good will change when the price of another good changes. See *Cross Elasticity of Demand*, INVESTOPEDIA <http://www.investopedia.com/terms/c/cross-elasticity-demand.asp> (last visited Feb. 7,

the defendant's product and the possible substitutes for it.⁹⁰ If market alternatives to the defendant's product are readily available, the defendant lacks monopoly power and thus has not violated Section 2.⁹¹

2. ICANN's Antitrust Defenses

Before ICANN was established, a number of plaintiffs brought antitrust lawsuits against NSI, ICANN's predecessor, for refusing to add new gTLDs to the root zone file.⁹² The district courts dismissed these claims under the federal instrumentality doctrine, which holds that parties with a contractual agreement with the U.S. government are granted antitrust immunity.⁹³ That argument was denied on appeal, where the Second Circuit and D.C. Circuit ruled that the mere existence of a government contract was not enough to confer absolute immunity from a federal agency (in this case, the Department of Commerce) to a federal contractor.⁹⁴ However, the circuit courts still dismissed the claims on equity grounds because the NSI was acting under explicit terms in its government contract about how properly to administer the DNS.⁹⁵ The circuit courts reasoned that NSI should not be punished for carrying out those terms.⁹⁶

Like NSI, ICANN could also argue that it is a private party acting under government contract should it face antitrust charges. ICANN was created in response to a government White Paper and was later controlled by the Department of Commerce.⁹⁷ Although a 2009 Affirmation of Commitments between ICANN and the Department of Commerce relaxed the Department's authority over ICANN by giving control to the larger stakeholder community, the Department still holds final authority over altering the root zone file.⁹⁸

2014). For example, the demand for butter would increase if the price of margarine increases; those two goods are substitutes.

90. *Eastman Kodak Co. v. Image Technical Servs., Inc.*, 504 U.S. 451, 481–82 (1992).

91. *United States v. E. I. du Pont de Nemours & Co.*, 351 U.S. 377, 391 (1956).

92. *See, e.g., Name.Space v. Network Solutions, Inc.*, 202 F.3d 573, 577 (2d Cir. 2002); *Thomas v. Network Solutions, Inc.*, 176 F.3d 500 (D.C. Cir. 1999). *See also* Froomkin & Lemley, *supra* note 17, at 33.

93. *See* Froomkin & Lemley, *supra* note 17, at 33.

94. *Id.*

95. *Id.*

96. *Id.*

97. ICANN's power was "derivative of the U.S. government's own authority." *See* Bruner, *supra* note 23, at 156. *See supra* Section I.A.

98. *See* A. Michael Froomkin, *Almost Free: An Analysis of ICANN's 'Affirmation of Commitments,'* 9 J. TELECOMM. & HIGH TECH. L. 187, 203 (2011).

However, despite the Department's involvement in ICANN, it is unlikely that a court would find that ICANN is a private party acting under explicit government contract. ICANN has routinely argued that it is an independent non-government entity bound by the needs of the entire world.⁹⁹ Furthermore, the 2009 Affirmation of Commitments has been internationally recognized as terminating the official agreement between ICANN and the Department of Commerce.¹⁰⁰ Recently, at the ICANN 48 Conference in Argentina, ICANN pledged to enter an age of global expansion and break free from the United States' "sphere of influence."¹⁰¹ Therefore, it is unlikely that a court would find that ICANN is a private party acting under continuous government contract, and thus ICANN would not have immunity from antitrust liability.

Finally, ICANN could argue that it is immune from antitrust liability because it is not acting in trade or commerce as required by the Sherman Act.¹⁰² However, ICANN's identity as a nonprofit organization does not immunize it from antitrust liability. Instead, the court must look at the particular transactions in question and analyze them in light of the circumstances.¹⁰³ If the transaction is commercial, then the nonprofit organization is acting in trade and therefore is subject to the Sherman Act.¹⁰⁴ Consequently, it is unlikely that ICANN will be able to argue that ICANN is immune from antitrust liability under this theory.

B. ICANN'S SECTION 2 ANTITRUST VIOLATIONS

This Section addresses ICANN's independent liability for its control of the gTLD market and therefore only analyzes ICANN's actions under Section 2 of the Sherman Act, which polices unilateral conduct.¹⁰⁵ As mentioned in Part I, ICANN controls the number of gTLDs and chooses the registries that maintain those gTLDs. This control has given ICANN monopoly power in the gTLD sphere.¹⁰⁶ Even when companies applied to ICANN for approval of new gTLDs, ICANN had the power to reject the

99. See Froomkin & Lemley, note 17, at 38.

100. Froomkin, *supra* note 98, at 200.

101. See Kiran Malancharuvil, *ICANN 48 in Buenos Aires: What Happened and What's Next?*, CIRCLEID (Dec. 11, 2013, 12:06 PM), http://www.circleid.com/posts/20131211_icann_48_in_buenos_aires_what_happened_and_whats_next.

102. In fact, ICANN has already argued this. See *Manwin Licensing Int'l S.A.R.L. v. ICM Registry, LLC*, No. CV 11-9514, 2012 WL 3962566, at *5 (C.D. Cal. Aug. 14, 2012).

103. *Id.* at *5.

104. *Id.* at *5–6.

105. 15 U.S.C. § 2 (2012).

106. See Blue, *supra* note 74, at 397.

applications, and ICANN did so with great frequency.¹⁰⁷ ICANN also has contracts with each of its registry operators that all but guarantee a no-bid automatic renewal when their terms expire. A competitive renewal process is only initiated on the rare chance that the registry operator breaches certain terms.¹⁰⁸ With such a limited number of gTLDs and ultimate control over the new gTLDs and their registries, ICANN had the requisite possession of monopoly power in the relevant market.¹⁰⁹

Before the influx of the new gTLDs, the problem with finding ICANN liable under Section 2 came in the second prong: the “willful acquisition or maintenance of that power as distinguished from growth or development as a consequence of a superior product, business acumen, or historic accident.”¹¹⁰ It can be argued that ICANN initially obtained a monopoly over gTLDs when the U.S. government awarded it that power in a so-called “historic accident.”¹¹¹ ICANN has further suggested that its monopolism in preserving a small number of gTLDs is necessary for Internet stability and protection of trademark holders.¹¹² Critics, however, have argued that the slow process of initiating new gTLDs and registries, despite the lack of research as to the effect of new gTLDs, is indicative of ICANN’s willful maintenance of its monopoly power.¹¹³

The new gTLD program, however, refutes these critics’ arguments. The new program reveals that ICANN believes the DNS is capable of

107. *Id.* For example, in 2000 and 2004, ICM registry applied to ICANN for approval of .xxx, and ICANN rejected the proposal because it found that there was no need for a new gTLD. *See Coal. for ICANN Transparency v. VeriSign, Inc.*, 611 F.3d 495, 500 (9th Cir. 2010). The ICM registry operates the .xxx gTLD for the adult entertainment community. *See* Rosemary S. Tarlton & Julia D. Kripke, *Important Notice for Trademark Owners: Protecting Rights In Light of New Adult-Entertainment Domains*, MORRISON FOERSTER (Aug. 22, 2011), <http://www.mofo.com/files/uploads/images/110822-adult-entertainment-domains.pdf>. After a number of independent reviews, ICANN finally approved the new gTLD and signed an unlimited long-term registry contract with ICM. *See Mannin Licensing*, 2012 WL 3962566, at *3.

108. *See Coal. for ICANN Transparency*, 611 F.3d at 500.

109. Courts have also looked at alternate markets to determine market power. The only other market for gTLDs, however, is alternate roots, and there have been many articles published about why alternate roots are not adequate substitutes. *See e.g.*, Blue, *supra* note 74; Froomkin & Lemley, *supra* note 17; Froomkin, *supra* note 16; Marsh, *supra* note 62; Uddin, *supra* note 47.

110. *United States v. Grinnell Corp.*, 384 U.S. 563, 570–71 (1966).

111. *Id.*

112. *See* Edward Brunet, *Defending Commerce’s Contract Delegation of Power to ICANN*, 6 J. SMALL & EMERGING BUS. L. 1, 6 (2002).

113. *See* Froomkin & Lemley, *supra* note 17, at 23–24.

maintaining many new gTLDs.¹¹⁴ After 2014, thousands of new gTLDs will be introduced into the domain name system.¹¹⁵ Companies have the opportunity to create and maintain registries for an infinite number of top-level domains.¹¹⁶ ICANN is not maintaining a monopoly in the gTLD market. Instead of using an opaque registry selection, ICANN allows companies to settle their differences privately in order to choose which company will maintain the registry; only in last resorts does ICANN proceed with a public auction for the gTLD string.¹¹⁷ Companies have the power to object to strings based on a number of criteria, and registrants can respond to the objections.¹¹⁸ As such, it seems ICANN is attempting to loosen its control of the gTLD sphere in response to the second prong of Section 2. Critics of ICANN can still argue that the long process to find adequate funding and create a thorough plan to run the registry hinders competitions among registries. However, the Ninth Circuit has previously held that “a high price alone is not an antitrust violation.”¹¹⁹ With its new gTLD scheme, ICANN has likely escaped antitrust liability under Section 2 of the Sherman Act.

C. ICANN'S SECTION 1 ANTITRUST VIOLATIONS

Since there are currently a small number of gTLDs, critics have alleged that ICANN is hindering competition not only among registries, but also among consumers.¹²⁰ Since ICANN has unlimited contracts with registries, critics allege that ICANN is assisting in an agreement amongst registries to restrain trade, which is illegal under Section 1 of the Sherman Act.¹²¹ Consumers have limited choices among existing registries, especially since many of them are not open to the public. As such, they are limited to using registries like VeriSign, which are well known and open to the public.

As of September 2013, fifty-three percent of all registered websites had the gTLD of *.com*, owned by VeriSign. The next highest percentage of websites (5.7 percent) were registered under the TLD of *.net*, which VeriSign

114. *Frequently Asked Questions*, *supra* note 3.

115. *Id.*

116. *Id.*

117. GUIDEBOOK, *supra* note 65, at 1.28.

118. *Id.* at 4.2–4.5.

119. *See* Coal. for ICANN Transparency v. VeriSign, Inc., 611 F.3d 495, 500 (9th Cir. 2010).

120. Froomkin and Lemley argue that the ICANN DNS registration system for top-level domains inherently violates Section 1 of the Sherman Act because of the limited number of top-level domain registrars and their overarching control on the market. Froomkin & Lemley, *supra* note 17, at 52–53.

121. *See* 15 U.S.C. § 1 (2012); Froomkin & Lemley, *supra* note 17, at 52–53.

also owns.¹²² In 2006, the Ninth Circuit found that ICANN awarded VeriSign the contract for *.com* without any bidding.¹²³ As such, one private company is essentially controlling close to sixty percent of the market with collusion from ICANN.¹²⁴

There is no indication that there are any alternative products or possible substitutes to the favorite *.com* gTLD.¹²⁵ Additionally, unlike in a standard market, where the product is relatively elastic and responds to changes in price, in this system, sellers have little incentive to offer low prices in a market where demand is inelastic.¹²⁶ ICANN has no incentive to discourage or prevent individual registry operators like VeriSign from charging high prices because consumers have nowhere else to turn. In the last few years, the demand for *.com* has increased, as demonstrated by its growing percentage of use while the prices have stayed stable.¹²⁷

122. *Use of Top-level Domains for Websites*, W3TECHS, http://w3techs.com/technologies/overview/top_level_domain/all (last visited Jan. 26, 2014).

123. *Coal. for ICANN Transparency*, 611 F.3d at 500.

124. There is no precise definition of how much market power is sufficient to show a monopoly. In *United States v. Aluminum Co. of America*, 148 F.2d 416, 424 (2d Cir. 1945), Judge Hand said that a market share of ninety percent “is enough to constitute a monopoly; it is doubtful whether sixty or sixty-four percent would be enough; and certainly thirty-three [percent] is not.” *Id.* The Supreme Court has endorsed this view. *See Am. Tobacco Co. v. United States*, 221 U.S. 106 (1911). The Fifth Circuit has more recently stated that “monopolization is rarely found when the defendant’s share of the relevant market is below 70%.” *Exxon Corp. v. Berwick Bay Real Estate Partners*, 748 F.2d 937, 940 (5th Cir. 1984). The Tenth Circuit has observed that to establish “monopoly power, lower courts generally require a minimum market share of between 70% and 80%.” *Colo. Interstate Gas Co. v. Natural Gas Pipeline Co. of Am.*, 885 F.2d 683, 694 n.18 (10th Cir. 1989) (citation omitted). The Third Circuit noted that “a share significantly larger than 55% has been required to establish prima facie market power” and found that a market share between 75–80% of sales is “more than adequate to establish a prima facie case of power.” *United States v. Dentsply Int’l, Inc.*, 399 F.3d 181, 188 (3d Cir. 2005).

125. *See infra* Sections III.B & III.C.

126. An elastic product is one where a change in the price of the good leads to a change in the quantity demanded. In contrast, an inelastic product is one where a change in the price of a good does not cause a change in the quantity demanded. An example of a relatively inelastic product is gasoline because a change in the price of gasoline does not usually change the demand for gasoline. For a more detailed explanation of elasticity, see *Economic Basics: Elasticity*, INVESTOPEdia <http://www.investopedia.com/university/economics/economics4.asp> (last visited Feb. 24, 2014).

127. Use of *.com* has gone from forty-four percent in 2011, to forty-eight percent in 2012, to fifty-three percent in 2013. *See* SEDO, 2011 ANNUAL DOMAIN MARKET STUDY, 3, 10 (2011), available at http://www.sedo.com/fileadmin/documents/pressdownload/Q4_2011_DomainMarketStudy_US.pdf; *see also* SEDO, 2012 ANNUAL DOMAIN MARKET STUDY, 3, 10 (2012), available at http://www.sedo.com/fileadmin/documents/pressdownload/Q2_2012_DomainMarketStudy_US.pdf.

However, despite its prima facie appearance of restricting competition, the agreement between VeriSign and ICANN does not actually restrain commerce in the relevant market. Consumers do not choose *.com* due to a conspiracy between VeriSign and ICANN to reduce access to other gTLDs, but rather due to outside pressures to use *.com*.¹²⁸ As such, even the advent of hundreds of new gTLDs would not produce an appreciable or effective increase in competition. Despite its claim, ICANN's new program probably will not increase competition in any meaningful way.¹²⁹

D. POTENTIAL FOR OTHER ANTITRUST VIOLATIONS DUE TO GTLDS

In a hearing to the House of Representatives in 2011, Federal Trade Commission chairman Jon Leibowitz said, "We worry that if ICANN goes broadly and doesn't ensure accuracy, it's going to be exponentially worse. There is going to be a burden on businesses, which will have to defensively register. We see a lot of cost but not a lot of benefit."¹³⁰ Currently, there are a number of worries that big name players will monopolize the Internet. Donuts, Inc.¹³¹ has applied for 307 gTLDs, Neustar has applied for 234, Google has applied for 101, and Amazon has applied for seventy-eight.¹³² John M. Simpson, the director of Consumer Watchdog's Privacy Project, wrote to the chairman of Senate Commerce, Science, and Transportation Committee:

If these applications are granted, large parts of the internet would be privatised. It is one thing to own a domain associated with your brand, but it is a huge problem to take control of generic strings. Both Google and Amazon are already dominant players on the internet. Allowing them further control by buying generic domain

128. See *infra* Sections III.B & III.C.

129. See *infra* Part IV.

130. *Oversight of the Antitrust Enforcement: Hearing Before the Subcomm. on Intellectual Prop., Competition, & the Internet of the H. Comm. on the Judiciary*, 112th Cong. (2011) (statement of Jon Leibowitz, Chairman, Federal Trade Commission). Leibowitz was worried about ICANN approving too many gTLDs, which would require businesses to defensively register their products. See *id.*

131. Donuts Inc. was founded specifically for the purpose of applying for and running new gTLDs. See Julianne Pepitone, *'Donuts' Startup Lands \$100 Million for Dot-Brand Domains*, CNN MONEY (June 5, 2012, 12:58 PM), http://money.cnn.com/2012/06/05/technology/donuts-domains-funding/index.htm?source=cnn_bin; DONUTS INC., <http://www.donuts.co> (last visited Feb. 27, 2014).

132. *New gTLD Application Status*, INTERNET CORP. FOR ASSIGNED NAMES & NUMBERS <https://gtldresult.icann.org/application-result/applicationstatus/viewstatus> (last visited Mar. 11, 2014).

strings would threaten the free and open Internet that consumers rely upon.¹³³

By registering domain names like *.blog*, Google could theoretically implement a policy that all *.blog* domains must use its blogger service (stamping out competitors like Tumblr or Wordpress). If Google were to own all the second-level *.blog* domains, customers might have to use Google's blogger if they wish to register a blog. Typically, a company is under no obligation to deal with potential rivals and can refuse with immunity.¹³⁴ However, the Supreme Court has held that antitrust liability can be extended to a company that has absolute control over a resource and refuses to provide access to a competitor.¹³⁵ In *Verizon Communications v. Law Offices of Curtis V. Trinko*,¹³⁶ the Court narrowed this holding by explaining that a company will only be liable under Section 2 of the Sherman Act if it abandons a prior profitable course of dealing with a competitor for anticompetitive reasons or if it is itself a competitor in the downstream market for its products, thereby giving it a monopolistic incentive to refuse to deal with downstream competitors.¹³⁷ That latter factor may be a possible way for companies like Tumblr to ensure that Google is required to provide a domain name, even under a closed domain name system. However, it is unlikely that Simpson's prediction will come true considering that ICANN has frozen applications for gTLDs, and those companies that registered for closed generic registries have amended their applications.¹³⁸

III. NEW GTLDS WILL NOT SOLVE ANY POTENTIAL ANTITRUST VIOLATIONS

Professors Froomkin and Lemley and other critics argue that the potential antitrust violations would be eliminated with the advent of more gTLDs that are owned by registrars other than VeriSign.¹³⁹ However, this argument assumes that VeriSign's market power will shift with the advent of

133. See Jenna Jones, *Watchdog Attacks Google and Amazon over gTLD Applications*, IP PRO THE INTERNET (Sept. 21, 2012), http://www.ipprotheinternet.com/ipprotheinternetnews/domainnamesarticle.php?article_id=2551#.UugDdxDTnIU.

134. See *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, 472 U.S. 585, 585 (1985).

135. *Id.*

136. 540 U.S. 398, 409 (2004).

137. *Id.* at 409.

138. See Michael Berkens, *Google Backs Off on Closed Generic Strings Including .Search So Does L'Oréal*, THE DOMAINS (Oct. 10, 2013), <http://www.thedomains.com/2013/10/10/google-backs-off-on-closed-generic-strings-including-search-so-does-loreal/comment-page-1>.

139. Froomkin & Lemley, *supra* note 17, at 52.

new gTLDs, and that *.com* will become less popular. There is nothing to indicate that this will be the case. VeriSign's market power will only shift if companies perceive a scarcity of gTLDs and therefore have reason to purchase the new gTLDs. However, there is no engineering scarcity of TLDs—only an artificial scarcity¹⁴⁰ created in the *.com* realm.

A. ENGINEERING THEORY OF SCARCITY

Engineering scarcity of a good exists when demand for the product exceeds the resources available to satisfy consumer desires.¹⁴¹ Land in San Francisco, for example, is considered a relatively scarce resource because there is a large number of people who want land, while there is only a finite amount of earth in that location and no way of creating more. In contrast, there is an artificial scarcity if there exists the means to produce sufficient amount of the product, but the production is deliberately kept low, usually to increase the price of the product.¹⁴² For example, property in San Francisco is an artificially scarce resource; there is a way to build a seemingly infinite amount of homes, but those homes are not created.¹⁴³ Similarly, the United States has the means to print an unlimited amount of dollar bills, but doing so would cause hyperinflation.

As noted previously, several commentators view the DNS as limiting the number of domain names.¹⁴⁴ Furthermore, one firm (VeriSign) essentially

140. Although this Note and the other articles that are mentioned employ the term “artificial scarcity,” the term is not quite appropriate. An artificial scarcity requires that all of the goods are interchangeable. For example, Bitcoins are considered an artificially scarce resource since each coin is identical to the other, even though they all have a unique string identifier. See Joe Weisenthal, *Here's What Bitcoin Gets Right*, BUS. INSIDER (Nov. 24, 2013, 9:33 AM), <http://www.businessinsider.com/heres-what-bitcoin-gets-right-2013-11>. A better term to describe this type of scarcity is “economic scarcity.” See Karl M. Manheim & Lawrence B. Solum, *An Economic Analysis of Domain Name Policy*, 25 HASTINGS COMM. & ENT L.J. 359, 388 (2003). However, most law review articles use the two terms interchangeably (with a larger percentage using the term “artificial scarcity”), and thus, artificial scarcity is used in this Note to remain consistent.

141. *Scarcity*, INVESTOPEDIA, <http://www.investopedia.com/terms/s/scarcity.asp> (last visited on Feb. 7, 2014).

142. Ronald Coase's theory has been used to discuss this issue of artificial scarcity. He wrote an article on point where he said, “Since we are usually concerned with a particular problem, we think not in terms of the total supply but the supply available for a particular use.” R. H. Coase, *The Federal Communications Commission*, 2 J.L. & ECON. 1, 20 (1959).

143. Technically, a better term would be “economic scarcity,” since the homes would not be identical. Each property would have a different value due to external factors. See *supra* note 140 and accompanying text.

144. See *supra* notes 17–19 and accompanying text.

controls the limited resource, *.com*, thereby giving it monopoly power.¹⁴⁵ Some commentators have even suggested that ICANN and VeriSign violate antitrust law through the perpetuation of their policies and practices.¹⁴⁶

The current domain name regime does not, however, create true engineering scarcity, but rather artificial scarcity.¹⁴⁷ Technically, there is a near infinite supply of domain names; the problem is that domain names are not fungible.¹⁴⁸ There is a higher demand for some domain names over others, thereby creating an artificial scarcity.¹⁴⁹ Creating more gTLDs will not, however, affect the demand for domain names because individuals have little demand for the domain names that will be created under the new gTLDs. Furthermore, there is going to be little change in the monopolistic power of ICANN and VeriSign, since VeriSign's gTLDs will still represent the majority of domain names.

B. THERE IS A SUFFICIENT SUPPLY OF DOMAIN NAMES

In 1999, Wired magazine reported that almost all of the standard dictionary words in the Merriam-Webster dictionary had been taken as *.com* domain names; only 1,760 words were free out of 25,500 standard words.¹⁵⁰ It noted that, at the time, "only about 100 new dictionary-word.com domains" were registered every month.¹⁵¹ However, even if the pace of dictionary-word registration decreased and new words were added to the dictionary, based on Wired's hypothesis, there should have been an end to all *.com* registration within two years.¹⁵² Obviously, this did not occur.

145. *What Does .Com Mean?*, VERISIGN, https://www.verisigninc.com/en_US/domain-names/com-domain-names/what-does-com-mean/index.xhtml (last visited Feb. 24, 2014).

146. *See, e.g.*, Blue, *supra* note 74; Froomkin & Lemley, *supra* note 17; Marsh, *supra* note 62; Uddin, *supra* note 47; *see also supra* Sections II.B, II.C.

147. *See* JENNY NG, *THE DOMAIN NAME REGISTRATION SYSTEM: LIBERALISATION, CONSUMER PROTECTION AND GROWTH* 122–23 (2012). *See also supra* note 140 and accompanying text.

148. *See Fungibility*, INVESTOPEDIA, <http://www.investopedia.com/terms/f/fungibility.asp> (last visited on March. 13, 2014). *See also supra* notes 141, 144 and accompanying text.

149. There is only an artificial scarcity because technology exists to create an abundance of domain names. *See LDH (Letter, Digit, Hypben)*, INTERNET CORP. FOR ASSIGNED NAMES & NUMBERS, <http://www.icann.org/en/node/1145376> (last visited Jan. 26, 2014) [hereinafter *LDH*].

150. Declan McCullagh, *Domain Name List Is Dwindling*, WIRED (Apr. 14, 1999), <http://www.wired.com/science/discoveries/news/1999/04/19117>.

151. *Id.*

152. *See id.*

Currently, there are over 111 million *.com* domain names, and there are more added every month.¹⁵³ In 2009, the number of *.com* domain names was more than eight hundred times the number of domain-friendly words in Project Gutenberg's¹⁵⁴ online dictionary.¹⁵⁵ This is possible because domain names do not have to be one word; they can have numbers and dashes and contain made-up words. Conceivably, the domain name can have up to sixty-three characters.¹⁵⁶ Furthermore, it is becoming increasingly common to remove vowels to misspell words in domain names (such as Flickr, Socializr, and Tumblr) or to add random vowels (for example, Zzoomr and Ooooooc).¹⁵⁷ Individuals have created software that will randomly generate short, pronounceable domain names available for purchase.¹⁵⁸

Since domain names can contain letters, numbers, and hyphens, and can be between three and sixty-three characters long,¹⁵⁹ there is an incredible number of possible domain name combinations.¹⁶⁰ Even assuming that hyphens and numbers are not used, since they are less common, and using the median length of eleven characters, there are still more than three quadrillion possible domain names available.¹⁶¹ That number does not even account for other publically available gTLDs, such as *.net*, *.org*, *.info*, and *.biz*, and there are fewer than thirty-five million domain names currently registered online for those gTLDs.¹⁶² As such, it is impossible to say that there is an actual economic scarcity of domain names, or even *.com* domain names. Nor are there large barriers to entry,¹⁶³ considering a domain name

153. *Domain Counts & Internet Statistics*, WHOIS SOURCE, <http://www.whois.sc/internet-statistics> (last visited Jan. 26, 2014) [hereinafter *Domain Counts & Internet Statistics*].

154. Project Gutenberg is the world's oldest online dictionary and it contains full texts of public domain books.

155. Max Chafkin, *Good Domain Names Grow Scarce*, INC. (July 1, 2009), <http://www.inc.com/magazine/20090701/good-domain-names-grow-scarce.html>.

156. The world's longest possible domain name contains exactly sixty-three characters: <http://www.thelongestdomainnameintheworldandthensomeandthensomemoreandmore.com/record.htm>.

157. Chafkin, *supra* note 155.

158. *Id.*

159. LDH, *supra* note 150.

160. The actual number is ninety-nine digits long and calculated with the following formula: $\sum_{i=3}^{63} 37^i$.

161. Only 0.8 percent of domain names are over twenty-five characters long. See *Average Length of Domain Names*, ZOOKNIC, http://www.zooknic.com/Domains/dn_length.html (last visited Feb. 7, 2014).

162. *Domain Counts & Internet Statistics*, *supra* note 154.

163. Barriers to entry are obstacles that make it difficult to enter a market. *Barriers to Entry*, INVESTOPEDIA <http://www.investopedia.com/terms/b/barrierstoentry.asp> (last visited Feb. 7, 2014). For example, in the oil market, requirements to enter the market are a large amount of capital and access to oil.

can cost as little as \$10 a year if the user is not picky about his or her domain name.

Commentators have frequently mentioned that there is an artificial scarcity of domain names, or a lack of catchy and short domain names.¹⁶⁴ There is a problem of artificial scarcity if applicants attempt to have domain names that are guessable, meaningful, memorable, spellable, or enterable. For example, *www.bookstores.com* is a more valuable domain name than *www.kdispjbtdg.com* even though there is an equal number of letters in each one. For some very recognizable and popular domain names, there are huge barriers to entry for new consumers since the domain name can cost over a million dollars.¹⁶⁵ In short, even though there is no engineering scarcity in domain names, there is not a sufficient supply of “good” domain names, thereby creating an artificial scarcity.¹⁶⁶

C. THERE IS LITTLE DEMAND FOR NEW GTLDS

Even though there is an artificial scarcity of domain names for the *.com* gTLD, creating thousands of new gTLD's will not alleviate the problem because there is little demand for the new gTLDs over *.com*, the existing favorite gTLD.¹⁶⁷

1. *New gTLDs Are Not Popular*

In 2010, Michael Katz, Gregory L. Rosston, and Theresa Sullivan published a report to ICANN on the economic considerations of expanding to new gTLDs.¹⁶⁸ In the report, they analyzed some of the more recently created gTLDs, as well as the importance of different open TLDs.¹⁶⁹

With regard to *.mobi* (a TLD intended for mobile device-friendly websites that launched in 2007), the study found that registration for *.mobi* domain names did not reach expectations.¹⁷⁰ The CEO of dotMobi, the company that operates the gTLD *.mobi*, expected that there would be one million

164. See Froomkin & Lemley, *supra* note 17, at 52.

165. See e.g., Alyson Shontell, *The 25 Most Expensive Domain Names of All Time*, BUS. INSIDER (Dec. 23, 2012, 8:03 AM), <http://www.businessinsider.com/the-20-most-expensive-domain-names-2012-12?op=1>.

166. See NG, *supra* note 147, at 122–23.

167. See MICHAEL L. KATZ, GREGORY L. ROSSTON & THERESA SULLIVAN, ECONOMIC CONSIDERATIONS IN THE EXPANSION OF GENERIC TOP-LEVEL DOMAIN NAMES—PHASE II REPORT: CASE STUDIES 12 (2010), available at <http://archive.icann.org/en/topics/new-gtlds/phase-two-economic-considerations-03dec10-en.pdf> (“The relief of name scarcity is unlikely to be the principal source of social benefits derived from new gTLDs.”).

168. See generally *id.*

169. *Id.*

170. *Id.* at 20.

registrations in the first year, but he received twenty percent fewer registrations than expected.¹⁷¹ Furthermore, less than thirty-seven percent of *.mobi* domain names were renewed two years later.¹⁷² Additionally, although *.mobi* was intended to provide value for websites intended to be viewed on mobile sites, according to a *Los Angeles Times* article published in 2010, *.mobi* domain names “are now all but worthless” because the current mobile technology allows most websites to be easily accessible.¹⁷³

In 2001, *.museum*, a registry restricted to genuine museums, began accepting registrations.¹⁷⁴ The owner of the registry (MuseDoma) explained that individuals could use the gTLD “to locate museums, even without knowing their precise names.”¹⁷⁵ For example, if a user wanted to go to the website for the Louvre, they could simply enter www.Louvre.museum without having to determine the correct domain name, and a search engine user could quickly identify the relevant page without having to browse through multiple entries. Furthermore, a museum without a public relations budget and without a large online presence would essentially get free advertising in the *.museum* index.¹⁷⁶ In MuseDoma’s application to ICANN to create the new gTLD, it estimated that forty thousand institutions may qualify for the *.museum* gTLD.¹⁷⁷ However, in 2010, when ICANN’s report was published, only 556 different entities had registered, yielding an estimated attrition rate of about 1.4 percent.¹⁷⁸ In present day, there are 562 unique entities in the *.museum* index, and there are an estimated fifty-five thousand museums in the world, which yields an attrition rate of about one percent.¹⁷⁹

When the ICANN report analyzed a ten percent sample of the domain names on the *.museum* index, it found that fifty-five percent of the sites either

171. *Id.*

172. *Id.* For example, in 2007, someone purchased poker.mobi for \$150,000, and the site is now defunct. See Bridget Carey, “Mobi” Mobile Domain Names Snapped Up by Speculators Are Now All But Worthless, *LOS ANGELES TIMES* (June 9, 2010), <http://articles.latimes.com/2010/jun/09/business/la-fi-domains-20100609>.

173. See Carey, *supra* note 172.

174. Carl Karp & Kenneth Hamma, *A Top-level Museum Domain*, ARCHIMUSE (Mar. 15, 2001), <http://www.archimuse.com/mw2001/papers/hamma/hamma.html>.

175. *What Will a Museum Give You*, .MUSEUM, <http://about.museum/benefits.html> (last visited Jan. 26, 2014).

176. This index is the list of names that have registered under the *.museum* gTLD.

177. *Executive Summary of ICANN Application*, .MUSEUM, http://www.nic.museum/exec_summary.html (last visited Feb. 7, 2014).

178. See KATZ, ROSSTON & SULLIVAN, *supra* note 167, at 27.

179. *Museum Names Containing the Label “.”*, .MUSEUM, <http://index.museum/fullindex.php> (last visited Jan. 26, 2014).

had no content or returned errors, thirty-two percent redirected to other sites, and only thirteen percent had museum content that was not available on any other domains.¹⁸⁰ In short, most of the domains did not provide unique content, and more than half of the domains provided no content at all. The report also analyzed various gTLDs and found that second-level domains other than *.com* were more than fifty percent less likely to contain content, much more likely to redirect to other gTLD sites, and much more likely to return unavailable sites.¹⁸¹ For example, for *.net* and *.org* domains, more than thirty-one percent of sites redirected the user to a different gTLD, more than thirty-four percent of the sites were not available, and less than seventeen percent of the sites stayed on a page with active content.¹⁸² Compare this with *.com* sites, where less than six percent of sites redirected the user to another gTLD, less than three percent of the sites were unavailable, and more than ninety-two percent of the sites stayed on the same page.¹⁸³

The same ICANN report also found that most brands are registered in *.com*, and the rest of the companies with headquarters outside of the United States are registered under their ccTLDs.¹⁸⁴ Brands that are registered in *.com* are registered on an average of 2.7 other gTLD's (*.net*, *.org*, *.biz*, *.info*), and the more valuable the brand, the more likely it is to register for other gTLDs.¹⁸⁵ The less valuable brands register fewer domains than do the most valuable brands, but even the top brands do not always register for non-*.com* gTLDs; the top brands register for an average of only seventy-five percent of other gTLDs, and many of these non-*.com* registrations do not support commercial content relevant to the brand of the company.¹⁸⁶ The report hypothesizes that this is because "many brand owners will not feel compelled to register their brands in new gTLDs if those new gTLDs offer no worse trademark protections and no better opportunity for gathering traffic than existing gTLDs brands."¹⁸⁷

Overall, the research indicates that creating more gTLDs does not create a larger market. Most of the top brands only register outside of their main gTLD (*.com*) for a defensive purpose, and then usually redirect the traffic to their main site. Less popular brands are less likely to register defensively,

180. Katz, Rosston & Sullivan, *supra* note 167, at 42.

181. *Id.* at 72.

182. *Id.* at 73.

183. *Id.*

184. *Id.* at 64–65. ccTLDs are country code top-level domains, such as *.uk*, *.fr*, and *.ru*.

185. *Id.* at 66.

186. *Id.* at 65–66.

187. *Id.* at 66.

which suggests “that significant costs may be borne only by the holders of the most valuable brands.”¹⁸⁸ Furthermore, the creation of new gTLDs does not seem to create a large amount of new content because existing companies use these gTLDs to redirect traffic, while less well-known companies may not use gTLDs at all.¹⁸⁹ This suggests that large brands like Apple and IBM will use gTLD’s like *.apple* and *.ibm* to link to their main *.com* site, and generic brands like *.maps* and *.book* will act similarly to the *.museum* gTLD. In other words, until consumer preferences change, most brands that have existing sites will redirect to their main site *www.books.google.com* and *www.maps.google.com*, and smaller stores will end up sticking with original gTLDs without ever purchasing domain names in the new gTLD sphere.

2. *Domain Names Are Losing Importance*

Evan Williams, the man who co-founded Blogger and Twitter, explained that domain names are getting less important every year.¹⁹⁰ First, and probably most important, is the prevalence of using natural searches to find webpages. The percentage of adult Internet users who use search engines on a typical day has been steadily rising, growing from less than thirty percent in 2004 to a new high of fifty-nine percent of all adult Internet users in 2012.¹⁹¹ Furthermore, the search engines (Google, Yahoo!, Bing, Ask, etc.) have been improving steadily every year. Fifty-five percent of search engine users say that, in their experience, the quality of search results is getting better over time, and ninety-one percent of users say that they always or usually find the information that they are looking for when using search engines.¹⁹² According to one survey in 2013, almost fifty percent of all web traffic to thirty different websites in various industries came from natural searches.¹⁹³ Consumer electronics, online retail, and education get between fifty-three and fifty-six percent of their traffic from natural searches.¹⁹⁴ Users are more likely to look for a particular product or service through a search engine than to try to access various sites and search independently on each one, especially if they

188. *Id.* at 74.

189. *Id.*

190. See Giles Turnbull, *Do Domain Names Even Matter Any More?*, TIME (June 24, 2011), <http://techland.time.com/2011/06/24/do-domain-names-even-matter-any-more>.

191. See Kristen Purcell, Joanna Brenner & Lee Rainie, *Search Engine Use 2012*, PEW INTERNET (Mar. 9, 2012), <http://www.pewinternet.org/Reports/2012/Search-Engine-Use-2012/Summary-of-findings.aspx>.

192. *Id.*

193. Nathan Safran, *310 Million Visits: Nearly Half of All Web Site Traffic Comes from Natural Search*, CONDUCTOR BLOG (June 25, 2013), <http://www.conductor.com/blog/2013/06/data-310-million-visits-nearly-half-of-all-web-site-traffic-comes-from-natural-search>.

194. *Id.*

are new users.¹⁹⁵ In contrast, the banking and finance industries see a larger portion of their traffic coming from direct visits, as users log in to online banking or trading websites through direct site access, presumably because they are not new users.¹⁹⁶

Furthermore, most website traffic comes from referrals, either through social media, links from other websites like Yelp, or through emails. Unless a user is talking about a general website, usually it is easier to provide a hyperlink to share with friends, especially because “the full URL is typically so lengthy and convoluted that the vast majority of users simply copy and paste hyperlinks so that the intended recipient can simply click on a link.”¹⁹⁷ This is especially true when users are close to their cell phones that have access to the Internet. It is simply easier to send an email link to a friend than to tell them, “I got this pair of boots from karmaloop.com, and you’re going to have to go and search for Jeffrey Campbell Lita and it should be on the second page.” Or even worse, “I got these shoes at <http://www.karmaloop.com/product/The-Lita-Shoe-in-Black/114750>,” because a user would rarely remember that string. Additionally, users often post videos and newspaper articles on social media that have character limits, like Twitter. In those cases, users will use link shorteners, which mask URLs and convert them to short versions, thus making actual URLs almost irrelevant.¹⁹⁸

Some users never even see domain names because they are constantly browsing on mobile devices. According to a recent survey, twenty-one percent of adult cell phone owners do most of their online browsing through a cell phone rather than through a desktop or laptop computer.¹⁹⁹ On a desktop computer, domain names are visible at the top of every page, which draws the attention of the user. However, due to space constraints, the address bar at the top of the screen on a cell phone is often hidden, and if a user hovers over a link, there is no status bar at the bottom of the page that provides the domain name.²⁰⁰ Furthermore, most major websites have

195. *Id.*

196. *Id.*

197. *See* Uddin, *supra* note 47, at 828–31.

198. *See* Jenna Wortham, *Google Challenges Bit.ly as King of the Short*, N.Y. TIMES: BITS (Dec. 14, 2009, 10:00 PM), <http://bits.blogs.nytimes.com/2009/12/14/googl-challenges-bitly-as-king-of-the-short>.

199. *See* Maeve Duggan & Aaron Smith, *Cell Internet Use 2013*, PEW INTERNET (Sept. 16, 2013), <http://www.pewinternet.org/Reports/2013/Cell-Internet.aspx>; *see also* Brian Conlin, *50 Astonishing Mobile Search Stats and Why You Should Care*, VOCUS (June 4, 2013), <http://www.vocus.com/blog/50-mobile-search-stats-and-why-you-should-care>.

200. *See* Evan Williams, *Five Reasons Domains Are Getting Less Important*, EVHEAD, <http://evhead.com/2011/06/five-reasons-domains-are-less-important.html> (last visited Feb. 28, 2014).

applications (“apps”) that can be used to navigate through features in the site that do not interact with the domain name or the gTLD.²⁰¹ Finally, “visual URLs” like QR codes—two dimensional bar codes that can be scanned by a mobile device—allow users to visit a specific site without ever entering a URL.²⁰² The growing use of this visual browsing technology would allow individuals to navigate to online destinations without ever seeing or entering an actual URL.

Evan Williams explains that although some people think of URLs as telephone numbers, very few people actually memorize numbers.²⁰³ Usually, they will save the numbers onto their cell phones and never remember them again.²⁰⁴ Similarly, many users bookmark, favorite, or star frequently visited websites rather than memorizing the websites’ URLs. Most internet browsers also have an auto-complete or “suggest” feature in their address bars that memorize domains once users have visited more than once.²⁰⁵ On average, twenty-nine percent of traffic to a website comes through direct traffic.²⁰⁶ However, direct traffic is not limited to manually entered web addresses; rather, it also includes traffic from bookmarks and auto-complete.²⁰⁷ Unfortunately, without direct access to Google’s analytics of a website, it is impossible to determine the percentage breakdown of each category of direct traffic.

More gTLDs will not make a difference in the marketplace if people do not type domain names into their browsers at all. Domain names only matter the first time a consumer manually accesses a website, which happens rarely in the modern technological atmosphere.

201. See Zoe Fox, *Mobile-App Use Increased 115% in 2013*, MASHABLE (Jan 14, 2014), <http://mashable.com/2014/01/14/mobile-app-use-2013>.

202. See Kim-Main Cutler, *People Actually Use QR Codes (in China)*, TECHCRUNCH (May 29, 2013), <http://techcrunch.com/2013/05/29/people-actually-use-qr-codes-in-china>.

However, there are people who believe that QR codes are “dead.” See Ilya Pozin, *QR Codes: Are They Dead Yet?*, LINKEDIN (May 13, 2013), <http://www.linkedin.com/today/post/article/20130513152348-5799319-qr-codes-are-they-dead-yet>; Alexander Taub, *QR Codes Are Dead! Long Live QR Codes! A Conversation with Scan’s Founder, Garrett Gee*, FORBES (Dec. 6, 2012, 10:41 AM), <http://www.forbes.com/sites/alextaub/2012/12/06/qr-codes-are-dead-long-live-qr-codes-a-conversation-with-scans-founder-garrett-gee>.

203. Williams, *supra* note 200.

204. See Sarah Maslin Nir, *Dumbed-Down Dialing*, N.Y. TIMES, Aug. 29, 2010, at ST7.

205. See *How Do I Enable Autofill in My Browser?*, COMPUTER HOPE, <http://www.computerhope.com/issues/ch001377.htm> (last visited on Feb 7, 2014).

206. See Brandon Gaille, *23 Terrific Statistics on Referral and Direct Website Traffic*, BRANDONGAILLE.COM (Oct. 16, 2013), <http://brandongaille.com/23-terrific-statistics-on-referral-and-direct-website-traffic>.

207. See Safran, *supra* note 193.

IV. RECOMMENDATIONS AND PREDICTIONS FOR BUSINESSES

Since the application period for companies wanting to act as registrars for new gTLDs is over, it is important to know where companies should go from here with regard to creating new domain names. First, with the arrival of the Sunrise Periods of gTLDs,²⁰⁸ trademark owners should make sure to register their trademarks with the Trademark Clearinghouse (“TMCH”). So far, only twenty thousand trademarks have been registered with TMCH, which is curious given that about eighteen thousand trademarks are registered within the United States every year.²⁰⁹ By registering with the TMCH, the registry owner is obligated to provide notice if another applicant applies for a domain name in the registered trademark.²¹⁰ Trademark holders are given the right of first refusal to get the name that matches their trademark.²¹¹

Furthermore, companies should try to register their brands defensively in the generic extensions before another company does so. Although this Note hypothesizes that gLTDs will not change the .com-centric DNS, other companies are likely to make use of the new gTLDs. It is better to register for second-level domains before another company with a similar brand does.

Given the fact that domain names are losing importance, this Note predicts that the advent of new gTLDs will not significantly change the existing domain name space. Companies are accustomed to their domain names, and they have built up reputations for the current domain names to rank highly in search engines.²¹² However, it is possible that marketing could build up new domain names in the corresponding new gTLDs. Conceptually, the idea of thousands of new gTLDs makes sense. It will make websites

208. See *Trademark Clearinghouse FAQs*, ICANN NEW GENERIC TOP-LEVEL DOMAINS, <http://newgtlds.icann.org/en/about/trademark-clearinghouse/faqs> (last visited Apr. 13, 2014).

209. See *Crunching the New gTLD Numbers*, WORLD INTELL. PROP. REV. (Dec. 19, 2013), <http://www.worldipreview.com/article/crunching-the-new-gtld-numbers>.

210. See *Questions for the GAC—Protection of Rights*, INTERNET CORP. FOR ASSIGNED NAMES & NUMBERS, <http://archive.icann.org/en/topics/new-gtlds/questions-on-scorecard-protection-of-rights-28feb11-en.pdf> (last visited Jan. 26, 2014).

211. See *id.*

212. Search-engine ranking refers to how high a site appears in a search engine in unpaid search results. Usually, higher ranked sites correlate with more traffic from search engine users. That ranking is dependent on an algorithm developed by each search engine that looks at a number of factors including the age of the site, the number of visitors to the site, the number of links to the site from other websites, etc. See David Harry, *How Search Engines Rank Web Pages*, SEARCH ENGINE WATCH (Sept. 23, 2013), <http://searchenginewatch.com/article/2064539/How-Search-Engines-Rank-Web-Pages>.

easier to identify and brand—if a consumer is looking for a certain brand of shoes, he or she can just go to the domain name *www.adidas.shoes*. Nevertheless, it is unlikely that the search will play out in that manner. If a consumer already knows the brand, it is just as easy to go to their *.com* web address; in contrast, if the consumer is searching for a particular brand, it is unlikely that they will enter a domain name rather than go through a search engine or a referral.²¹³ Without the support of larger companies, it is unlikely that smaller brands will use the new gTLDs as opposed to their current established top-level domain. The idea of generic top-level domains makes the most sense in an offensive context, where a company has a product innovation. For example, Canon could provide a secondary domain name for every consumer's individual camera, and then consumers could just go to a website with their images based on the domain name provided (e.g., *www.27462828.canon*). However, most of these ideas would be just as effective with the current model (e.g., *www.canon.com/users/27462828*). In short, although there will not likely be a significant change in competition with the arrival of new gTLDs, existing companies will find ways to make use of the gTLDs.

V. CONCLUSION

Although critics of ICANN's current model view the new gTLDs as solutions to the anticompetitive DNS atmosphere, it is unlikely to create much of a difference. Although adding more gTLDs will increase competition for new registries and thereby alleviate ICANN's antitrust concerns, it is unlikely that the new gTLDs will increase competition for consumers in the *.com*-centric internet model. The predominant effect of the gTLD expansion program will be to produce an ICANN money-making vehicle, which will raise costs for the many entities using the Internet and possibly produce a new set of monopolization concerns within new gTLDs.²¹⁴

213. *See supra* Section III.B.2.

214. *See supra* Sections I.B, I.C.

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SYMBIOTIC RELATIONSHIPS: PRAGMATIC ACCEPTANCE OF DATA SCRAPING

Jeffrey Kenneth Hirschey[†]

Automated data collection on the Internet is nothing new, and scrapers continually access and repost data for other websites. Although past scrapers parasitically reposted information to directly *compete* with the scraped website, scrapers now offer mutualistic benefits that can *help* scraped websites. This information is often highly valuable to the businesses that collect it, and they go to great lengths to protect it. Search engines, PageRank,¹ and advertising all use bots to collect information stored by others. With the advent of improved data analytics and the increased technical ease of gathering data, the potential benefits of scraping data have never been higher. This increasingly complex symbiotic relationship between scrapers and data hosts, from parasitic to mutualistic, overlays the already uncertain legal background of scraping case law.

Web services can gather information from data hosts—websites that store or house target data—primarily by parsing or scraping data. Parsing generally refers to the collection of information from the data host directly.² Parsing accesses a website’s underlying data structures through a series of formalized data requests, often through application programming interfaces (“APIs”). PHP and other common server-side scripting languages are perhaps the most widespread parsers on the Internet.³ In contrast, data scraping can be broadly defined as a data collection technique where a computer program extracts and reposts data from a user output.⁴ Data

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1. *PageRank*, GOOGLE, <https://support.google.com/toolbar/answer/79837?hl=en> (last visited Mar. 4, 2014).

2. See Cory Janssen, *Definition of Parsing*, TECHNOPEdia, <http://www.techopedia.com/definition/3853/parse> (last visited Jan. 30, 2014).

3. PHP is the largest server-side programming language and is used on over 244 million websites and 2.1 million web servers. See *History of PHP and Related Projects*, PHP, <http://us1.php.net/history> (last visited Jan. 30, 2014); see also *Usage Stats for January 2013*, PHP, <http://www.php.net/usage.php> (last visited Jan. 30, 2014).

4. See *Scraping*, PC MAG., <http://www.pcmag.com/encyclopedia/term/57344/scraping> (last visited Jan. 30, 2014); John Wagnon, *Web Scraping—Data Collection or Illegal Activity*, DEVCENTRAL (May 16, 2013), <https://devcentral.f5.com/articles/web-scraping-data-collection-or-illegal-activity#.UovBOGSglX8>.

scraping typically collects data from screen outputs or extracts data from the HyperText Markup Language (“HTML”) code that most websites display.⁵ Although parsing provides stable access to underlying web data, scraping can access large amounts of data without the permission, or even knowledge, of the data host. Although the technical distinctions between scraping and parsing remain murky, scraping is often regarded with a more negative connotation.⁶

Many widespread uses of data scraping are mutualistic: they benefit both data hosts and scrapers. Scraping services allow many users to find the information they seek more easily. Familiar web search engines are essentially scrapers that pull small amounts of data—i.e., the search terms a user enters—to link a user to relevant webpage results.⁷ Yet search engines have avoided much of the negative stigma associated with scraping, and they are an instrumental part of the online ecosystem. Indeed, most search engines are instead referred to as “web indexers” or “web crawlers” even though the URL and hyperlink data collected can often be directly used to perform data scraping.⁸ Data scraping may also be used to track the way webpages link to each other. Google’s ubiquitous PageRank algorithm is perhaps the largest scraping system and uses a web crawler called GoogleBot to scrape data from billions of webpages.⁹ This model is predicated upon unfettered access to data, and data hosts provide little resistance given the overwhelming benefit that they receive.

Despite some positive applications of scraping, scraping is parasitic when scrapers benefit at the exclusion or detriment of data hosts. Scrapers can collect information without the consent of data hosts and may undercut a website’s revenue by republishing scraped data without requiring users to

5. Friedrich Lindenberg, *Getting Data from the Web*, DATA JOURNALISM HANDBOOK, http://datajournalismhandbook.org/1.0/en/getting_data_3.html (last visited Jan. 30, 2014).

6. Arpan, *Data Scraping vs. Data Crawling*, PROMPT CLOUD (May 30, 2012), <http://blog.promptcloud.com/2012/05/data-scraping-vs-data-crawling.html>; *see also* *Crawler vs scraper*, STACK OVERFLOW, <http://stackoverflow.com/questions/3207418/crawler-vs-scraper> (last visited Jan. 30, 2014).

7. For general background on information retrieval on the web, see Mei Kobayashi & Koichi Takeda, *Information Retrieval on the Web*, 32 ACM COMPUTING SURVEYS 144 (2000), available at <http://dl.acm.org/citation.cfm?doid=358923.358934>.

8. *What Is a Screen Scraper?*, WISEGEEK, <http://www.wisegeek.com/what-is-a-screen-scraper.htm> (last visited Jan. 30, 2014).

9. GoogleBot is the script that gathers data to support Google’s search engine. Google describes the action of the bot stating, “We use a huge set of computers to fetch (or ‘crawl’) billions of pages on the web.” *See GoogleBot*, GOOGLE, <https://support.google.com/webmasters/answer/182072?hl=en> (last visited Jan. 30, 2014). *See generally* *How Google Search Works*, GOOGLE, <http://www.google.com/competition/howgooglesearchworks.html> (last visited Jan. 30, 2014).

view supporting advertisements. Worse still, scrapers may derive their own ad revenues, viewers, and customers by taking content directly from another data host.¹⁰ Scraping may collect personally identifying information (“PII”) thought to be private and can have serious privacy implications.¹¹ Scraping activity may even directly harm a data host’s core services or prevent users from using those services.¹²

Unsurprisingly, data hosts have fought to control their data using various legal and technological methods in myriad contexts online. In perhaps the most famous data scraping case, online auction website eBay sued the now defunct auction compiler Bidder’s Edge over republication of auction data from eBay.¹³ Airline price aggregators, websites that aggregate and display price and flight information from multiple airline carriers, such as Kayak, Orbitz, and Expedia, have been subject to legal action.¹⁴ Real estate multiple listing services (“MLS”) have sued data scrapers that reposted real estate advertisements, descriptions, and listing photos without obtaining consent.¹⁵

10. Google AdSense has tried to limit monetization of scraped content through AdSense’s terms of service and program policies. The policies strictly limit the permitted uses of scraped data. See *AdSense Program Policies*, GOOGLE, https://support.google.com/adsense/answer/48182?hl=en&ref_topic=2864301 (last updated Jan. 10, 2014).

11. Scrapers have targeted sensitive information message boards where people discussed emotional disorders, collected PII for background checks, shared private information from social media networks, and provided data so employers can screen job candidates. See Julia Angwin & Steve Stecklow, *‘Scrapers’ Dig Deep for Data on Web*, WALL ST. J. ONLINE (Oct. 12, 2010, 12:01 AM), <http://online.wsj.com/news/articles/SB10001424052748703358504575544381288117888>.

12. Some courts allow data hosts to redress these harms through contract claims, for example when a bot has violated the scraped site’s terms of use, as well as a variety of tort claims. In *MDY Industries v. Blizzard*, the Ninth Circuit found that a bot used to automate World of Warcraft gameplay violated an “effective access control measure,” triggering a number of causes of actions. *MDY Indus., LLC v. Blizzard Entm’t, Inc.*, 629 F.3d 928, 954 (9th Cir. 2010). Use of the bot not only violated Blizzard’s Terms of Service, but it also gave rise to a claim for tortious interference and violated the Digital Millennium Copyright Act (“DMCA”), 17 U.S.C. § 1201(a)(2). *Id.* Further, a company that sold “automated devices to access and navigate through Ticketmaster’s website,” allowing users to purchase desirable tickets before other customers, was found by a California district court to violate Ticketmaster’s terms of use and support several other state and federal claims. See *Ticketmaster L.L.C. v. RMG Techs., Inc.*, 507 F. Supp. 2d 1096, 1102 (C.D. Cal. 2007).

13. *eBay, Inc. v. Bidder’s Edge, Inc.*, 100 F. Supp. 2d 1058 (N.D. Cal. 2000).

14. Southwest sued Orbitz alleging Orbitz had posted false and misleading price information about Southwest’s fare information. See *Sw. Airlines v. Orbitz LLC*, No. 2:01-cv-04068 (C.D. Cal. filed May 3, 2001); see also Michael Mahoney, *Orbitz Sued by Southwest Airlines*, E-COMMERCE TIMES (May 4, 2001, 10:01 PM), <http://www.ecommercetimes.com/story/9518.html>.

15. See *Metro. Reg’l Info. Sys., Inc. v. Am. Home Realty Network, Inc.*, 722 F.3d 591, 592 (4th Cir. 2013). See generally Marianne M. Jennings, *Multiple Listing Services—Antitrust and Policy*, 32 REAL EST. L.J. 140 (2003).

Many major banks and financial institutions have sued financial data aggregators, financial money management applications such as Mint, or account aggregation vendors.¹⁶ Social media giant Facebook has sued third-party applications that have attempted to access and republish Facebook's user data.¹⁷ Financial brokerage houses have sought to stem the flood of investing advice leaking from their websites by suing those who republish and threatening to break the established price-discrimination model.¹⁸ Data hosts have even sued scrapers with whom they initially contracted to catalog their data.¹⁹ There are countless examples of recent cases where data hosts sought legal remedies for the collection and dissemination of their data.

Recently, Craigslist has been one of the most vigilant, and visible, data hosts to take a stand against scraping. With over fifty billion page views per month, Craigslist is the third most visited American Internet company.²⁰ Craigslist operates a series of online classified advertisements where users post hundreds of millions of ads for goods and services each year.²¹ Recently, Craigslist sued 3Taps, PadMapper, and Lovely, which are services that sought to augment Craigslist's interface by providing users with an integrated, easy-to-navigate map that displayed the locations of user-generated ads.²² At the

16. For a brief overview of financial and account aggregators, see generally Nathan J. Sult, "Show Me the Money": *The Emerging Technology of Internet Financial Aggregation*, 5 HAW. B.J. 20 (Mar. 2001); see also Kimberly L. Wierzel, *If You Can't Beat Them, Join Them: Data Aggregators and Financial Institutions*, 5 N.C. BANKING INST. 457 (2001).

17. See, e.g., *Facebook, Inc. v. Power Ventures, Inc.*, 844 F. Supp. 2d 1025, 1027 (N.D. Cal. 2012).

18. Price discrimination models charge different rates for similar goods in different markets. These models require a separation between markets or the goods will simply drop to the lowest price across any of the markets. In an online information context, price discrimination often involves selling information that is not widely available or publically accessible. If this information becomes public then there is no longer an incentive to pay for it, and the data host loses customers. Brokerage firms have attempted to protect the dissemination of early financial recommendations using a variety of misappropriation and copyright claims. See, e.g., *Barclays Capital Inc. v. Theflyonthewall.com, Inc.*, 650 F.3d 876, 878 (2d Cir. 2011).

19. Scraping violations can be alleged contractually when a data host contracts directly for a data scraping service. Breach can occur if this contract is then violated and, unlike other scraping contexts, the scraper can also sue the data host. Data hosts have even been sued when they hire vendors to scrape their own data to create product catalogues. See *Edgenet, Inc. v. Home Depot U.S.A., Inc.*, 658 F.3d 662, 663 (7th Cir. 2011); *Snap-on Bus. Solutions Inc. v. O'Neil & Assocs., Inc.*, 708 F. Supp. 2d 669, 671–72 (N.D. Ohio 2010).

20. *Craigslist Factsheet*, CRAIGSLIST, <http://www.craigslist.org/about/factsheet> (last visited Mar. 7, 2013); *Craigslist, Inc. v. 3Taps, Inc.*, 942 F. Supp. 2d 962 (N.D. Cal. Apr. 30, 2013).

21. *Craigslist*, 942 F. Supp. 2d at 966.

22. See, e.g., *Terms of Service—§ 1.2: 3taps' Manifesto*, 3TAPS, <http://www.3taps.com/terms.php> (last updated Oct. 22, 2010).

time of writing, this dispute is currently ongoing in the Northern District of California, with all of Craigslist's major claims having survived a motion to dismiss.²³ Although still incipient, this litigation represents one of the most recent high-profile scraping cases and provides a good model to analyze the legal claims commonly asserted by data hosts against scrapers.²⁴ Understanding the legal standards for these claims is critical to understanding the legal framework that surrounds suits between data hosts and scrapers.

Despite Craigslist's hard-line stance against data scrapers, this Note argues that data hosts stand to benefit when their users can most effectively access the data they seek—even when scrapers, rather than the data hosts themselves, facilitate this access. Data hosts should recognize the benefit scrapers can provide and take a pragmatic approach to those who scrape their data. Specifically, data hosts should only seek legal remedies against scrapers when (1) the scraper presents a threat to the data host's core business and (2) the data host has a strong enough claim to prevail legally against the scraper.

This Note uses *Craigslist v. 3taps* to discuss the current legal regime surrounding data scraping on the Internet. This Note intends to be of practical significance to the data host community, both in terms of data management and litigation strategy, and in helping them recognize new opportunities to use scraping to their advantage. Part I sketches the technical background on scraping, discusses the current regime of legal protections for databases, outlines the key legal claims often brought against scrapers, and lays out the common legal and technological steps that data hosts have taken to protect their data. Part II examines recent scraping litigation to frame the contexts when suits have been successful in protecting data hosts and user interests, and when suits have been largely unsuccessful to prevent new services from supplanting existing data hosts. Part II also focuses on what factors a data host should consider before bringing suit against scrapers and offers suggestions for how data hosts might establish frameworks to work more cooperatively with scrapers. The Note concludes with a brief consideration of how changing cyberlaw regimes may affect a data host's ability to bring suit against scrapers in the near future.

23. *Craigslist*, 942 F. Supp. 2d at 965–66.

24. Three of Craigslist's claims—a Computer Fraud and Abuse Act (“CFAA”) claim, a copyright infringement claim, and a trespass claim—survived the motion to dismiss. *Id.* These are typical claims exerted by data hosts. Although early in the litigation, surviving the motion to dismiss suggests these claims are not being brought frivolously and that they may have some bite.

I. SCRAPING BACKGROUND AND HOW DATA HOSTS CAN PROTECT THEIR DATA

To understand the legal and business implications of data scraping, it is important to first understand how scraping works from a technical perspective. Section I.A briefly discusses the Craigslist litigation, while Section I.B overviews the technical foundations of scraping and how websites can be scraped online. Section I.C next discusses the current legal protections available for databases and their implication in scraping cases. Section I.C also examines the current legal standard for the major claims typically asserted by data hosts against scrapers: violation of the Computer Fraud and Abuse Act (“CFAA”), trespass to chattel, and compilation copyright claims. Lastly, Section I.D outlines the most common defensive measures, both legal and technical, that data hosts take against scrapers.

A. OVERVIEW OF THE CRAIGSLIST LITIGATION

Craigslist’s claims against 3Taps, Padmapper, and Lovely represent only the most recent case in a series of ongoing lawsuits against scrapers by Craigslist. Craigslist has built enormous market share in online classified advertisements and actively seeks to prevent competitors from entering the market by pursuing legal action against nearly every service that has scraped it.²⁵ In 2005, Craigslist stopped Oodle, a service that used screen-scraping to display ads in a search engine.²⁶ In 2007, Craigslist blocked Listpic, a service that displayed photos with user ads.²⁷ In 2009, Craigslist blocked Flippity, a service that displayed Craigslist postings within a map.²⁸ Each of these services sought to improve Craigslist’s underlying functionality by providing users with additional services or features beyond the native Craigslist interface. Despite these potential benefits to user experiences, Craigslist has

25. See John Koetsier, *3Taps Sues Craigslist to Save the Internet (No Seriously)*, VENTURE BEAT (Sept. 24, 2012, 4:52 PM), <http://venturebeat.com/2012/09/24/3taps-suing-craigslist-save-internet>.

26. Craigslist continued to block Oodle even when the service discontinued its use of screen scraping to collect data from Craigslist. See John Battelle, *Craigslist Blocks Oodle*, JOHN BATTELLE’S SEARCH BLOG (Oct. 14, 2005), http://battellemedia.com/archives/2005/10/craigslist_blocks_oodle.php.

27. See Meg Marco, *Craigslist Blocks “ListPic” Tool for Viewing Craigslist Pictures*, CONSUMERIST (June 8, 2007), <http://consumerist.com/2007/06/08/craigslist-blocks-listpic-tool-for-viewing-craigslist-pictures>; John Musser, *Craigslist Blocks Mashup Listpic*, PROGRAMMABLE WEB (June 18, 2007), <http://blog.programmableweb.com/2007/06/18/craigslist-blocks-mashup-listpic>.

28. See Jason Kincaid, *Craigslist Blocks Yahoo Pipes After Dev Shows Craig His New Mashup*, TECHCRUNCH (Dec. 1, 2009), <http://techcrunch.com/2009/12/01/craigslist-yahoo-pipes-flippity>.

consistently resorted to threats of or actual litigation to prevent unauthorized use of its data.

In the current litigation, Craigslist alleges that Padmapper, 3Taps, and Lovely improperly gathered classified ad information from Craigslist and reposted that information on their own websites alongside a map interface that plotted the location of the user-generated classified ads.²⁹ Interestingly, Craigslist itself now offers a similar mapping service.³⁰ The district court for the Northern District of California recently denied the defendants' motion to dismiss the compilation copyright infringement, violation of the Computer Fraud and Abuse Act ("CFAA"), and trespass to chattel claims.³¹ These are three of the most commonly asserted claims brought by data hosts against scrapers, and all three survived the motion to dismiss. Despite the early state of the Craigslist litigation, these claims remain the key legal claims in most scraping cases.

The Craigslist litigation is an interesting comparison tool for other scraping cases. Despite changing legal regimes,³² the three major claims in past scraping cases are the claims that Craigslist exerted here. These claims mostly rely upon the protections that the data host set up rather than inherent protections for data generally.

B. TECHNOLOGICAL BACKGROUND FOR DATA SCRAPING

When users access the Internet, they are greeted with visual representations of underlying web data. When a user types in a website's domain name, for example, www.google.com, a protocol called a Domain

29. Craigslist outlined the technological specifics of the 3Taps, Padmapper, and Lovely services in its complaint. *See* Complaint at 8–15, *Craigslist, Inc. v. 3Taps, Inc.*, 942 F. Supp. 2d 962 (N.D. Cal 2013) (No. CV-12-3816-LB).

30. After years of user demand for a mapping function, Craigslist finally added a mapping function in 2012. This mapping function is very similar to the options provided by scrapers in the past. *See* Josh Ong, *Craigslist Rolls Out New Map View Feature for Apartment Searches*, THE NEXT WEB (Oct. 4, 2012), <http://thenextweb.com/insider/2012/10/04/craigslist-rolls-out-new-map-view-feature-for-apartment-searches>.

31. The district court did note that it was still very early in the litigation and many issues presented by these claims, such as a demonstration of harm required under trespass to chattel claims, would still need to be demonstrated at a later stage in the litigation. *See Craigslist*, 942 F. Supp. 2d at 966. The district court also severed the defendants' antitrust counterclaims, and it is likely the court will only address them following the resolution of Craigslist's claims. *See id.* at 982. Although antitrust discussions are beyond the scope of this Note, it is interesting that antitrust counterclaims are commonly asserted against data hosts by scrapers. It is presently unclear what level of data control would have significant antitrust implications though it is easy to hypothesize a data host denying accesses to data would likely trigger antitrust concerns at some point.

32. *See infra* Section I.C.

Name Service (“DNS”) translates that domain name into an Internet Protocol (“IP”) address, which the user’s web browser can then access to display that website’s or server’s data.³³ Users can also navigate to websites by following Uniform Resource Locators (“URLs”) that link different websites together.³⁴ To present data in a user-friendly manner, web browsers create graphic representations of websites from HTML code and data that the website supplies.³⁵

Scraping accesses data either via data displayed to a user’s screen or from the underlying HTML code. Because these are designed as user outputs, it is technically simple to pull data from them. A quick web search offers numerous options to scrape data: how-to guides about scraping, guidance in writing your own scraping program, and even options to purchase scraping software.³⁶ Given the ease of access and low barrier to entry for data scraping, it can be difficult to anticipate and prevent the many ways data scraping can be performed. Generally, websites focus on ease of use and accessibility to users, making it easier for scrapers to harvest data from nicely formatted user outputs.

33. Although IP addresses were initially introduced in 1987, the current IP—IPv6—was created by the Internet Engineering Task Force and uses 128 bits to store addresses. *See* S. DEERING & R. HINDEN, INTERNET ENG’G TASK FORCE, INTERNET PROTOCOL, VERSION 6 (IPV6): SPECIFICATION (Dec. 1998), <http://www.ietf.org/rfc/rfc2460.txt>. IPv6 was adopted to increase the total number of available addresses and allow for more efficient routing. *Id.* *See generally* P. MOCKAPETRIS, INTERNET ENG’G TASK FORCE, DOMAIN NAMES—CONCEPTS AND FACILITIES (Nov. 1987), <http://tools.ietf.org/html/rfc1034>. The Internet Assigned Numbers Authority (“IANA”) administers and allocates IP address and DNS globally. *See About IANA*, INTERNET ASSIGNED NUMBERS AUTHORITY, <http://www.iana.org/about> (last visited Jan. 30, 2014).

34. Links and URLs are managed by standards set by the World Wide Web Consortium (“W3C”). *See URL: Living Standard*, WHATWG, <http://url.spec.whatwg.org> (last updated Feb. 3, 2014); *see also* Tim Berners-Lee, *Uniform Resource Locator*, W3C, <http://www.w3.org/Addressing/URL/url-spec.html> (last updated Nov. 1993). *See generally* Dan Connolly, *Naming and Addressing: URIs, URL, . . .*, W3C, <http://www.w3.org/Addressing> (last updated Feb. 27, 2006).

35. The W3C maintains a list of HTML tags that browsers use to display webpages. *See HTML Tags*, W3C, <http://www.w3.org/History/19921103-hypertext/hypertext/WWW/MarkUp/Tags.html> (last visited Jan. 30, 2014).

36. Web search results for scraping yield informative blog posts, python and PHP programming help for scrapers, software available for purchase, and how-to guides aimed at the technically unsavvy. *See, e.g.*, SCRAPY, <http://scrapy.org> (last visited Jan. 30, 2014). *See generally* HARTLEY BRODY, *THE ULTIMATE GUIDE TO WEB SCRAPING* (2013), *available at* <http://blog.hartleybrody.com/web-scraping-guide>; Michelle Minkoff, *How to Scrape Websites for Data Without Programming Skills*, POYNTER (May 11, 2010, 7:09 PM), <http://www.poynter.org/how-tos/digital-strategies/e-media-tidbits/102589/how-to-scrape-websites-for-data-without-programming-skills>.

Although scraping accesses user outputs for data, web data can also be collected in other ways. Web servers interact with each other using PHP code, and this code can be parsed to write data pull requests directly to servers.³⁷ Web crawling relies upon parsing to access and sort many webpages. Because parsing can be conceptualized as a more formal data request, there are some protocols, robots.txt being perhaps the most popular and widely used, that govern parsing requests.³⁸ These protocols are pieces of code embedded in webpages that tell crawlers which portions of the web page should or should not be accessed.³⁹ Yet these protocols are voluntary, and unscrupulous web crawlers can simply ignore them. Further, if the protocols are not properly set up, it is possible that even a well-meaning web crawler may not detect them.⁴⁰ Data can also be collected from web indexers that follow URLs and determine how webpages are connected to each other.⁴¹ Lastly, data can be collected from APIs. APIs are code interfaces that allow programmers to make very formal data requests from websites within a specific interface.⁴² These interfaces vary from service to service, but

37. Even basic programming tutorials teach how to use PHP to process data pull requests from servers. See Daniel Shiffman, *Tutorials: External Data into Processing II*, LEARNING PROCESSING, <http://www.learningprocessing.com/tutorials/external-data-into-processing-2> (last visited Jan. 30, 2014).

38. The Robots.txt protocol was established as a voluntary protocol to allow websites to dictate their preferences in what portions of a site bots should and should not access. See WEB ROBOTS PAGES, <http://www.robotstxt.org> (last visited Jan. 30, 2014).

39. Robots.txt protocols are small pieces of code placed in the header of websites to signal to bots. When a bot retrieves data from a website it encounters, the bot can then follow the directions provided by the robots.txt protocol. See *About / robots.txt*, WEB ROBOTS PAGES, <http://www.robotstxt.org/robotstxt.html> (last visited Jan. 30, 2014).

40. Websites that do not implement protocols correctly have been less successful in arguing that they intended to protect their data. In one case, a scraper copied dog breed data from a data host and reposted it on his own website. See *Tamburo v. Dworkin*, 601 F.3d 693 (7th Cir. 2010). The scraped website contained an improperly set up robots.txt protocol that the web crawler ignored. *Id.* The court found that the website's failure to properly execute the robots.txt protocol did not amount to consent for the website to be scraped, but this protocol had not protected the website's data at all. *Id.*; see also Venkat Balasubramani, *Calling Out Scraper for "Stealing" Data Is Not Defamatory*, TECH. & MARKETING L. BLOG (Oct 4, 2013), http://blog.ericgoldman.org/archives/2013/10/calling_out_scr.htm.

41. Many web indexers work similarly: they rely upon an efficient indexing of websites through use of a bot, and then use that index to provide faster search results or perform data analysis. See generally Sergey Brin & Lawrence Page, *The Anatomy of a Large-Scale Hypertextual Web Search Engine*, 30 COMPUTER NETWORKS & ISDN SYS. 107 (1998), available at <http://infolab.stanford.edu/~backrub/google.html>.

42. Although APIs may perform differently, they are all designed to interface between programs. Perhaps the most widely used APIs today are those of Google and YouTube. See *API Overview Guide*, GOOGLE, https://developers.google.com/youtube/getting_started (last updated May 10, 2013).

generally websites create specific methods that programmers can use to access data.⁴³ APIs are perhaps the most robust way web data can be accessed, but the highly structured interfaces and commands set by the data host may greatly limit the type, content, and volume of data that can be accessed.

Scraping ignores these protocols and accesses data directly from user outputs. By ignoring the underlying formats and data structures that store web data, scrapers can collect vast amounts of data without the permission of the data host.⁴⁴ Yet there are downsides to accessing data via scraping. Because scrapers collect data directly from output displays, the success and accuracy of scraping often depends on a website's output display remaining static.⁴⁵ Even small changes in a website's display may disrupt scraping. This instability represents a key tradeoff when scraping to collect data: scrapers can access large amounts of data, but any changes by data hosts can be very disruptive.

C. LEGAL PROTECTIONS FOR DATABASES

In the United States there is no direct legal protection for databases.⁴⁶ Although European laws and international treaties have extended legal protection to databases, U.S. law does not directly extend copyright protection to databases.⁴⁷ The Berne convention protects collections if “by reason of the selection and arrangement of their contents” they “constitute intellectual creations.”⁴⁸

43. *See id.*

44. Scrapers threaten loss of consumers, system overload, loss of ad revenue, loss of content, and devaluation. *See* Marino Zini, *Security Zone: Can You Prevent Scraping or Data Harvesting?*, COMPUTERWEEKLY.COM (Nov. 2009), <http://www.computerweekly.com/opinion/Security-Zone-can-you-prevent-scraping-or-data-harvesting>.

45. The key goal of screen-scraping is to take information that has been formatted to be human-readable and turn it into information that can be processed by a computer. Screen-scraping attempts to find relevant portions of a webpage and manipulate those pieces to extract the data the scraper seeks. *See* Eric Phetteplate, *Web Scraping: Creating APIs Where There Were None*, ACRL TECHCONNECT BLOG (Sept. 30, 2013), <http://acrl.ala.org/techconnect/?p=3850>.

46. *See* Daniel J. Gervais, *The Protection of Databases*, 82 CHI.-KENT L. REV. 1109 (2007) (examining the flexibility of international norms and their impact upon database protection, as well as the implications of extending protection to purely factual databases).

47. Agreement on Trade-Related Aspects of Intellectual Property Rights, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1C, 1869 U.N.T.S. 299, 33 I.L.M. 1197 (1994).

48. Berne Convention for the Protection of Literary and Artistic Works, Sept. 9, 1886, as revised at Paris on July 24, 1971 and amended in 1979, S. Treaty Doc. No. 99-27 (1986) [The 1979 amended version does not appear in U.N.T.S. or I.L.M.].

In contrast, U.S. patent and copyright law only extends protections to “Science and useful Arts,” or creative or inventive works.⁴⁹ A database itself only benefits from copyright protection if its organization is sufficiently creative.⁵⁰ Practically, copyright protection is minimal when applied to databases.⁵¹ Databases do not typically meet these requirements, and there is no protection for works based solely on the amount of time or effort invested to create them.⁵² Websites that seek to compile information thus face free-rider problems; they risk that others can take any factual data they have worked to acquire.⁵³

Misappropriation offers some protection for databases, but state law protections for database misappropriation under tort claims are also limited. Nevertheless, data scraping cases have proceeded under state misappropriation theories.⁵⁴ Congress has not yet passed federal tort laws protecting the misappropriation of “substantial proportions” of database protections.⁵⁵ Several bills have been introduced that would have protected databases built with a “substantial expenditure of financial resources or time,” but they have failed to pass in Congress.⁵⁶ Although federal tort

49. See U.S. CONST. art. I, § 8, cl. 8; 17 U.S.C. § 102 (2012). See generally U.S. COPYRIGHT OFFICE, COPYRIGHT LAW OF THE UNITED STATES AND RELATED LAWS CONTAINED IN TITLE 17 OF THE UNITED STATES CODE (2011), available at <http://www.copyright.gov/title17/circ92.pdf>.

50. See *Feist Publ'ns, Inc. v. Rural Tel. Serv. Co., Inc.*, 499 U.S. 340 (1991) (holding no copyright protection for facts); *Lotus Dev. Corp. v. Borland Int'l, Inc.*, 49 F.3d 807, 809 (1st Cir. 1995), *aff'd*, 516 U.S. 233 (1996) (holding that there was no copyright protection for computer menu command hierarchy terms).

51. See H.R. REP. NO. 106-349, pt. 1, at 10 (1999); see generally Julie Wald, Note, *Legislating the Golden Rule: Achieving Comparable Protection Under the European Union Database Directive*, 25 FORDHAM INT'L L.J. 987, 1028 n.186 (2002) (examining the differences between U.S. and E.U. database protection and comparing the E.U. Database Directive with potential U.S. legislation).

52. There is no protection for so-called “sweat of the brow” works, regardless of the amount of energy and time spent to create them. See *Feist*, 499 U.S. at 352–54.

53. See *id.*

54. Tort protections for misappropriation of databases are dependent upon jurisdiction. See *CollegeSource, Inc. v. AcademyOne, Inc.*, 653 F.3d 1066 (9th Cir. 2011) (alleging a database misappropriation claim after one website accused another of wholesale database copying).

55. See H.R. REP. NO. 106-349, pt. 1, at 11 (1999) (explaining how H.R. 354 would protect database misappropriation). The Collections of Information Antipiracy Act, H.R. 354, 106th Cong. (1999), which failed to pass Congress, would have also protected database misappropriation under a slightly different scheme. See Wald, *supra* note 51, at 991, 993–94.

56. Bills introduced in the 108th Congress would have created a federal tort of misappropriation if a “substantial part” of a database had been taken. See Database and Collections of Information Misappropriation Act, H.R. 3261, 108th Cong. (2003). Similar

protections for misappropriation might alleviate the free rider problem, there is no current legislation that does so.

In addition to limited protections for the databases themselves, data hosts often house data that intellectual property rights cannot protect. Data hosts may store data that is factual and cannot be protected.⁵⁷ Data hosts also often house data that is created by users and not the data host. Much of this user-generated content (“UGC”) is simply stored, not owned, by the data host. The content owners, typically users, have the ability to modify their data and may retain the intellectual property and ownership rights of their data unless user agreements or other contractual arrangements modify those rights.⁵⁸ Data hosts have less protection for UGC and have faced serious public outcry when attempting to obtain ownership of the underlying rights from the content owners.⁵⁹

To combat the lack of formal doctrinal protections, data hosts have created their own protections through technological and legal restrictions on the access of their information. Much of the data hosts’ protection comes from both new causes of action, such as the Computer Fraud and Abuse Act, and adaptations of old causes of action, such as porting trespass claims to the Internet.

1. *Computer Fraud and Abuse Act*

Data hosts often assert that scrapers have violated provisions of the Computer Fraud and Abuse Act (“CFAA”) and its state law counterparts.⁶⁰ The CFAA is an antihacking statute that was designed to prevent unauthorized access to websites and servers.⁶¹ There are many state law

attempts have been made in previous bills as well. *See* Collections of Information Antipiracy Act, H.R. 354, 106th Cong. (1999).

57. *See Feist*, 499 U.S. 340.

58. Many websites have terms of use that require users to give exclusive licenses or complete ownership to the website as a condition of signing up. Users may not be aware they are signing over their rights, as it is unlikely many read the terms in great detail, if at all. *See* Curtis Smolar, *Who Owns User-Generated Content?*, VENTURE BEAT (July 12, 2010, 6:00 AM), <http://venturebeat.com/2010/07/12/who-owns-user-generated-content>.

59. Data hosts have faced serious public-relations backlashes when they have sought exclusive licenses or control over UGC. *See* Mike Masnick, *Craigslist’s Abuse of Copyright and the CFAA to Attack Websites that Make Craigslist Better Is a Disgrace*, TECHDIRT (May 1, 2013, 9:29 AM), <http://www.techdirt.com/articles/20130501/04342822905/craigslist-abuse-copyright-cfaa-to-attack-websites-that-make-craigslist-better-is-disgrace.shtml>.

60. Computer Fraud and Abuse Act (“CFAA”), 18 U.S.C. § 1030 (2012).

61. *See generally* Charles Doyle, CONG. RESEARCH SERV., 97-1025, CYBERCRIME: AN OVERVIEW OF THE FEDERAL COMPUTER FRAUD AND ABUSE STATUTE AND RELATED FEDERAL CRIMINAL LAWS (2010), available at <http://www.fas.org/sgp/crs/misc/97-1025.pdf>.

corollaries to the CFAA, including California Penal Code section 502, which have “functionally identical” requirements to the CFAA.⁶² The CFAA imposes criminal penalties on a party who “intentionally accesses a computer without authorization or exceeds authorized access, and thereby obtains . . . information from any protected computer.”⁶³

CFAA violations typically arise only if the scraper has violated an “access restriction” when gathering the data. The language of the CFAA is broad, and courts have determined that nearly any violation of an access restriction to a website may suffice.⁶⁴ This includes violations of certain Terms of Use (“TOU”), as well as the evasion of technological defenses, such as IP blocking, that had been used to stop the scraper. Although CFAA claims are normally only exerted against parties that directly scrape a website for data, Craigslist asserted CFAA claims against parties that had gathered Craigslist’s data indirectly from a third party.⁶⁵

The Ninth Circuit’s opinion in *United States v. Nosal* is a recent interpretation of the language of the CFAA.⁶⁶ In *Nosal*, the court found that the phrase “‘exceeds authorized access’ in the CFAA is limited to violations of restrictions on access to information, and not restrictions on its use.”⁶⁷ These access restrictions might dictate which users could access data and which data they could access, or might include technological barriers to access.⁶⁸ Although the court found that the form of the access restrictions, contractual or technical, was immaterial, the court did find that violations of use restrictions do not violate the CFAA.⁶⁹ Although *Nosal* dealt with an employee who had exceeded his authorized access, many data scrapers are outside parties and not employees.⁷⁰

62. See CAL. PENAL CODE § 502 (West 2011); *Craigslist, Inc. v. 3Taps, Inc.*, 942 F. Supp. 2d 962, 968 (N.D. Cal. 2013).

63. CFAA, 18 U.S.C. § 1030(a)(2), (e)(2) (2012).

64. A definitive interpretation of “access restrictions” in the CFAA continues to be elusive. See *Facebook, Inc. v. Power Ventures, Inc.*, 844 F. Supp. 2d 1025, 1035–37 (N.D. Cal. 2012).

65. Craigslist alleged CFAA violations against Lovely and Padmapper, which did not access Craigslist’s servers directly. See *Craigslist*, 942 F. Supp. 2d at 971.

66. *United States v. Nosal*, 676 F.3d 854 (9th Cir. 2012).

67. *Id.* at 863–64.

68. *Id.*

69. *Craigslist*, 942 F. Supp. 2d at 970; see also *Nosal*, 676 F.3d at 862–64.

70. Increasingly, employers are bringing CFAA claims against employees. These claims typically allege that the employee, although an authorized user of the site, has improperly exceeded their access. Generally employees have passwords and do not violate technological restrictions that would stop outside users from entering a corporation’s computer systems. See, e.g., *People v. Childs*, 164 Cal. Rptr. 3d 287 (Ct. App. 2013). See generally David J. Rosen,

Even after the court's recent ruling in *Nosal*, it remains unclear exactly what constitutes an access restriction. Many websites employ click-through agreements and TOUs to govern how a user can interact with a website. When a data host suspects or discovers that a violation may have occurred, it traditionally sends cease-and-desist letters to all potential violators. Some have called these cease-and-desist letters "wish lists," and it is uncertain if courts view them as legitimate access restrictions, which would implicate CFAA violations, or merely use restrictions.⁷¹ In the Craigslist litigation, the district court acknowledged the holding in *Nosal* and characterized the cease-and-desist letters as demonstrating "clear statements regarding authorization."⁷² The district court did not distinguish the cease-and-desist letters from technological access restrictions that had constituted access restrictions in past cases.⁷³ Should cease-and-desist letters acquire legal significance (beyond notice) and constitute an access restriction, data hosts will undoubtedly allege more CFAA violations.

CFAA claims remain popular because liability under the CFAA can carry criminal charges,⁷⁴ which may serve as a deterrent to scrapers. In the wake of the *Nosal* ruling, however, a court's characterizations of restrictions as access or use restrictions will be a key issue. Under existing case law, data hosts may prevail under the CFAA if they can characterize TOUs, cease-and-desist letters, and click-through agreements as access restrictions. Moving forward, data hosts looking to pursue CFAA claims should make sure that they can adequately control user or scraper access to the website.

2. *Compilation Copyright*

Data hosts often bring copyright claims against scrapers if underlying content meets copyright requirements. Although these claims do not carry the criminal penalties associated with CFAA violations, copyright claims are popular because the damages can be very large and the copyright protections

Note, *Limiting Employee Liability Under the CFAA: A Code-Based Approach to "Exceeds Authorized Access,"* 27 BERKELEY TECH. L.J. 737, 738 (2012).

71. Courts view cease-and-desist letters as legally significant in providing notice to a scraper—the data host thinks they are causing a violation. But these "unregulated wish lists" become much more powerful and potentially disruptive if considered within a court's legal analysis as constituting something beyond notice. See Eric Goldman, *Craigslist Wins Routine but Troubling Online Trespass to Chattels Ruling in 3Taps Case (Catch-up Post)*, TECH. & MARKETING L. BLOG (Sept. 20, 2013) http://blog.ericgoldman.org/archives/2013/09/craigslist_wins_1.htm.

72. *Craigslist*, 942 F. Supp. 2d at 970.

73. See *Facebook, Inc. v. Power Ventures, Inc.*, 844 F. Supp. 2d 1025, 1038–39 (N.D. Cal. 2012).

74. CFAA, 18 U.S.C. § 1030(c) (2012).

have a long duration. However, data hosts are unlikely to prevail on copyright claims if they do not control the copyright of all the works or if the works are not registered appropriately. Although scrapers may have valid fair use defenses,⁷⁵ this Section only discusses the challenges data hosts face in asserting valid copyright claims.

Copyright protection is widely applicable and covers a broad range of subject matter, but databases are often not protectable because of their unprotectable facts. Generally, “[c]opyright protection subsists . . . in original works of authorship fixed in any tangible medium of expression, now known or later developed, from which they can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device.”⁷⁶ This requirement has been interpreted to require both fixation and originality.⁷⁷ Facts cannot be protected, as they are discovered and not created, but compilations of facts may receive protection if sufficiently original.⁷⁸

In *Craigslist*, the court found that the user-generated ads on the Craigslist site were sufficiently original in their organization and that they could be copyrighted if properly registered.⁷⁹ Even though the ads contained factual information, the court found that the arrangement of this information in a context chosen by users was sufficiently different from raw factual information that could not be protected.⁸⁰ Courts have previously found classified advertisements eligible for copyright protection, though the copyright for an assortment of ads did not extend to individual ads.⁸¹

Courts in MLS cases have found various degrees of protections for different portions or reposted real estate ads.⁸² The success of these suits

75. In the *Craigslist* case, there is a fair use argument that users who created ads can republish them on other websites, despite Craigslist’s exclusive license to them. See Stephanie Marie Davies, *Rants and Raves: Craigslist’s Attempt to Stop Innovating Third-Party Web Developers with Copyright Law*, 20 J. INTELL. PROP. L. 379 (2013); see also *Kelly v. Arriba Soft Corp.*, 336 F.3d 811, 815 (9th Cir. 2003) (finding thumbnail photos were a transformative use and benefited from the fair use defense).

76. 17 U.S.C. § 102(a) (2012).

77. Fixation has been interpreted as requiring embodiment. See *MAI Sys. Corp. v. Peak Computer, Inc.*, 991 F.2d 511, 518 (9th Cir. 1993).

78. The Copyright Act of 1976 specifically mentions compilations as being able to receive protection. See 17 U.S.C. § 103; *Feist Publ’ns, Inc. v. Rural Tel. Serv. Co., Inc.*, 499 U.S. 340, 345 (1991).

79. See *Craigslist, Inc. v. 3Taps, Inc.*, 942 F. Supp. 2d 962 (N.D. Cal Apr. 30, 2013).

80. *Id.*

81. See, e.g., *Want Ad Digest, Inc. v. Display Adver., Inc.*, 653 F. Supp. 2d 171, 175 (N.D.N.Y. 2009).

82. See Jennings, *supra* note 15, at 141–42.

often depends upon the type of reposted information. For example, when the MLS reposts pictures, the MLS is more likely to infringe copyright.⁸³ The verbal description of real estate ads, however, is less certain since the property descriptions contain both factual and nonfactual material. Although the statements often contain non-copyrightable facts, they also contain artful descriptions that may be eligible for protection.⁸⁴

Further increasing the burden on data hosts, the requirements for what constitutes a compilation work may be increasing. The U.S. Copyright Office published a new statement of policy restricting the scope of compilations.⁸⁵ It is also unclear if registration applications must include all individual authors in a compilation. For example, Craigslist registered their site as a compilation work, thus serving to register all component works to which Craigslist had an exclusive license.⁸⁶ The court looked to the Copyright Office's interpretation of the registration requirement and determined that "despite the omission of individual authors from the registration application" the registration of the collective work was still sufficient.⁸⁷ The court noted that given the volume of ads that Craigslist might have an exclusive license for, it might be "inefficient" to require registration of each individual author.⁸⁸ This logic may protect other data hosts who seek copyright protection for vast amounts of works.

Despite the Copyright Office's seeming willingness to allow the registration of large compilation copyrights, data hosts may struggle to achieve ownership of underlying data.⁸⁹ UGC generates unique copyright ownership problems for data hosts including public relations backlashes. Courts are split on whether a failure to adequately protect data constitutes an

83. *See, e.g.*, Metro. Reg'l Info. Sys., Inc. v. Am. Home Realty Network, Inc., 722 F.3d 591 (4th Cir. 2013).

84. *Id.*

85. Registration of Claims to Copyright, 77 Fed. Reg. 37,605, 37,606 (June 22, 2012) (to be codified at 37 C.F.R. pt. 201) ("[I]f a selection and arrangement of elements does not result in a compilation that is subject matter within one of the categories identified in section 102(a), the Copyright Office will refuse registration.")

86. The court found that registration of the ads through compilation copyright was sufficient for protection. *See* Craigslist, Inc. v. 3Taps, Inc., 942 F. Supp. 2d 962, 970–72 (N.D. Cal. 2013).

87. *Id.* at 972.

88. *Id.* at 974–76.

89. Electronic transfer of copyright is probably legal but may not be practical. To have sufficient legal standing to sue, a website must have an exclusive license to UGC, and gaining such a license may cause public relations issues. *See* Jeff Neuburger, *Staving Off Scrapers of User-Generated Content with Electronic Copyright Transfers . . . a Legal (But, Perhaps Not a Practical) Solution*, LEXOLOGY (Nov. 12, 2013), <http://www.lexology.com/library/detail.aspx?g=8e782324-659e-43ee-aa8b-88f83cebd31f>.

implied license for scrapers.⁹⁰ Generally, a data host must have an exclusive license from the content creator to be able to sue.⁹¹ Transfer of copyright ownership requires a written agreement signed by the copyright owner.⁹² Agreements can only be considered “a writing” to grant an exclusive license if the agreement demonstrated the parties’ intent to transfer a copyright.⁹³ Provided the click-wrap or browse-wrap constitutes a written agreement, user acceptance of that agreement can suffice as an electronic signature.⁹⁴ Electronic copyright transfers can grant an exclusive license.⁹⁵

For example, in the Craigslist litigation, Craigslist’s TOU alone did not specifically grant an exclusive license to sue on behalf of the content creators.⁹⁶ Although a non-exclusive license would be insufficient to sue, Craigslist attempted to sue over a subset of ads created when users had also agreed to a click-through agreement specifically granting an exclusive license.⁹⁷ Data hosts can only sue over UGC when they have an exclusive license, and this requires carefully formatted TOUs and click-through agreements.

Yet data hosts have struggled to gain exclusive licenses to content without raising alarm from consumer groups and generating public relations backlashes. Major data hosts have faced large press-relations issues when

90. Websites can use the robots.txt protocol to tell scrapers they do not wish to be scraped. Although this protocol is voluntary—i.e., it can be ignored by crawlers—courts often treat the use or failure to use this protocol as legally significant. *See supra* notes 38–40 and accompanying text. Courts remain split if failure to use a robots.txt protocol, or poor implementation of such a protocol, constitutes an implied license for scrapers. *See* Associated Press v. Meltwater U.S. Holdings, Inc., 931 F. Supp. 2d 537, 563 (S.D.N.Y. 2013) (finding no implied license when no robots.txt protocol was used). *But see* Parker v. Yahoo!, Inc., No. 07-2757, 2008 WL 4410095 (E.D. Pa. Sept. 25, 2008) (finding that the failure to use a robots.txt protocol constituted an implied license for scrapers).

91. Only the valid owner of the copyright or the grantee of an exclusive license can sue for copyright infringement. *See* Davis v. Blige, 505 F.3d 90, 100 (2d Cir. 2007).

92. *See* 17 U.S.C. § 204(a) (2012).

93. *See id.*; Radio Television Espanola S.A. v. New World Entm’t Ltd., 183 F.3d 922, 927 (9th Cir.1999) (internal citations omitted) (“Rather, the parties’ intent as evidenced by the writing must demonstrate a transfer of the copyright.”).

94. *See* Metro. Reg’l Info. Sys., Inc. v. Am. Home Realty Network, Inc., 722 F.3d 591 (4th Cir. 2013) (finding that user uploads of images sufficed to transfer an exclusive license for copyright).

95. The acceptability of electronic signatures depends upon state contract law. Intent to sign is required for click-wrap transactions to constitute electronic signatures. *See* UNIF. ELEC. TRANSACTIONS ACT § 9 (1999).

96. *See Terms of Use*, CRAIGSLIST, <http://www.craigslist.org/about/terms.of.use> (last visited Dec. 19, 2013).

97. *See* Craigslist, Inc. v. 3Taps, Inc., 942 F. Supp. 2d 962 (N.D. Cal Apr. 30, 2013).

changing their TOUs or privacy policies.⁹⁸ Craigslist quickly removed its exclusive license provision after user outcry.⁹⁹ Although an exclusive license is necessary for a data host to bring a copyright claim, it is unclear how to gain one without upsetting users.

In summary, data hosts' copyright claims are stronger than one would expect given cases like *Feist* and *Lotus*.¹⁰⁰ These claims require the underlying content to be sufficiently creative, and factual material is ineligible for protection. The line between factual material—which cannot be protected—and creative material—which can be—is occasionally murky and adds ambiguity to the protections a data host may receive. Further, UGC data is increasingly prevalent online and poses new copyright registration challenges to data hosts. Data hosts can require copyright ownership transfers of UGC through click-wraps, but doing so may generate a negative press backlash. Copyright protection is appealing, but these limitations have caused data hosts to turn to other protections as well.

3. *Electronic Trespass to Chattel*

Data hosts that are directly harmed by scrapers can bring trespass to chattel claims. These claims require the data host to prove the scraper has harmed them. The success of these claims in the Ninth Circuit may be decreasing after the recent *Intel v. Hamidi* ruling that server inconveniences did not constitute an actionable harm.¹⁰¹ Sophisticated scrapers are unlikely to actually crash a data host's server, which makes trespass claims seem increasingly unlikely to succeed.

Electronic trespass claims are essentially property law trespass claims that have been ported to digital and electronic contexts. Electronic trespass to

98. See Jeremy C. Owens, *Biz Break: Google, Facebook, and Instagram Risk User Backlash with Privacy Changes*, SAN JOSE MERCURY NEWS (Oct. 11, 2013, 4:15 PM), http://www.mercurynews.com/60-second-business-break/ci_24292785/biz-break-google-facebook-and-instagram-risk-user; see also Julianne Pepitone, *Instagram Can Now Sell Your Photos for Ads*, CNN MONEY (December 18, 2012), <http://money.cnn.com/2012/12/18/technology/social/instagram-sell-photos> (describing user backlash over Instagram's TOU allowing sale of user photos for ads).

99. See Kurt Opsahl, *Good News: Craigslist Drops Exclusive License to Your Posts*, ELECTRONIC FRONTIER FOUND. (Aug. 9, 2012), <https://www.eff.org/deeplinks/2012/08/good-news-craigslist-drops-exclusive-license-your-posts>; see also Nathan Matisse, *Craigslist Backtracks, Drops Exclusive License on Posts*, ARS TECHNICA (Aug. 9, 2012, 2:51 PM), <http://arstechnica.com/tech-policy/2012/08/craigslist-backtracks-drops-exclusive-licensing-on-posts>.

100. See *supra* note 50 and accompanying text.

101. *Intel Corp. v. Hamidi*, 71 P.3d 296 (Cal. 2003) (holding that one employee sending disruptive emails to fellow employees does not constitute trespass).

chattel claims require a “tangible interference” that obstructs a possessory interest.¹⁰² The current legal standard for electronic trespass to chattel claims was developed in *eBay v. Bidder’s Edge*.¹⁰³ The court set out a two-part test for a trespass to chattel claim, which requires that “(1) [the] defendant intentionally and without authorization interfered with plaintiff’s possessory interest in the computer system; and (2) [the] defendant’s unauthorized use proximately resulted in damage to plaintiff.”¹⁰⁴ Data hosts often attempt to show the scraper caused harm by demonstrating interference with servers or similar technical difficulties.¹⁰⁵

The standard for what constitutes harm has recently been raised in the Ninth Circuit.¹⁰⁶ In *Intel Corp. v. Hamidi*, the court found that minor interference with server usage was not sufficient to constitute an actionable harm.¹⁰⁷ However, the court left open the possibility that a greater interference, perhaps crashing a website’s server, may still be an actionable harm under trespass to chattel.¹⁰⁸ It is unclear how courts will interpret this new standard and what type of harm data hosts must prove.

In *Craigslist*, the court found that the scraper may have limited or diverted server resources from Craigslist’s servers.¹⁰⁹ The district court is still in the early stages of litigation, and the diversion of server resources may be rejected like the “minor interference” with server resources that was found insufficient in *Hamidi*. The court construed the magnitude of the server harm as a factual question that would be determined later in the litigation, and this potential harm was thus sufficient to deny the motion to dismiss on the trespass to chattel claim.¹¹⁰ While it remains unclear if Craigslist will prevail with a trespass claim on a server harm argument, the district court’s seeming reluctance to dismiss the trespass claim may represent a lower bar for harm than the clear language from *Hamidi* would suggest.¹¹¹

102. See *Ticketmaster Corp. v. Tickets.com, Inc.*, No. CV99-7654, 2003 WL 21397701, at *5 (C.D. Cal. Mar. 7, 2003) (granting summary judgment dismissing trespass to chattels for a failure to show physical harm or an impairment of servers).

103. *eBay, Inc. v. Bidder’s Edge, Inc.*, 100 F. Supp. 2d 1058, 1069–70 (N.D. Cal. 2000).

104. *Id.*

105. See *Snap-on Bus. Solutions Inc. v. O’Neil & Assocs., Inc.*, 708 F. Supp. 2d 669 (N.D. Ohio 2010) (denying summary judgment when plaintiff showed defendant had crashed their servers).

106. See *Hamidi*, 71 P.3d 296.

107. *Id.*

108. *Id.* at 304–05.

109. *Craigslist, Inc. v. 3Taps, Inc.*, 942 F. Supp. 2d 962 (N.D. Cal. 2013).

110. *Id.* at 966.

111. The *Craigslist* court’s reluctance to dismiss the seemingly weak electronic trespass claim may signal data hosts to bring further server harm arguments against scrapers in the

The continuing success of trespass to chattel claims is unclear. If determination of server harm is a factual question, it will be difficult for scrapers even to have weak claims dismissed at an early stage. Scrapers may not be willing or able to sustain a case to the point where trespass claims would be adjudicated. Yet data hosts will have an increasingly difficult time proving harm. Scraping technology becomes increasingly more sophisticated and servers more robust. Savvy scrapers can decrease their impact on target websites by decreasing the frequency of data pulls, using multiple IPs, and spreading the load across multiple servers.¹¹² Given the uncertainty of trespass claims, data hosts continue to rely upon contractual remedies to prevent data scraping.

D. DEFENSIVE MEASURES TAKEN BY DATA HOSTS

To compensate for a lack of explicit legal protections, data hosts use contractual and technological methods to control third-party access to their data. Some of these defensive measures can be implemented before any scraping has occurred. These may include password protection, required login, TOUs, and mandatory click-through agreements. Often a data host will implement all of these protections to give themselves the broadest legal protections. If a data host determines that scraping has occurred, the data host can then take additional steps to stop it.

Legally, TOUs and “click-through” agreements control how scrapers access a data host. TOUs are typically listed at the bottom of a webpage and passively display terms that users agree to by using a site or benefiting from its services.¹¹³ Click-through agreements require active input from a user and often provide comprehensive restrictions to delimit the permissible scope of user activity.¹¹⁴ Both the TOU and click-through agreement may even directly prohibit the gathering of data from the website. Although these provisions

future. The factual requirements set by the court in proving harm will undoubtedly have ramifications in future cases.

112. With more resilient servers designed to handle higher volume, scrapers are less likely to cause harm. Note that trespass requires an actual harm, so simply detecting a scraper will be insufficient. Scrapers often share advice on how to avoid interfering with servers, which could result in them being detected and then blocked. *See, e.g., How to Crawl Websites Without Being Blocked*, WEBSCRAPING.COM (Feb. 8, 2010), <http://webscraping.com/blog/How-to-crawl-websites-without-being-blocked>.

113. For a sample terms of use, see *Terms of Use*, CREATIVE COMMONS, <http://creativecommons.org/terms> (last updated Dec. 5, 2013).

114. Apple’s privacy policy describes the click-through agreement and restrictions imposed on users. *See Privacy Policy*, APPLE, <http://www.apple.com/privacy> (last updated Aug. 1, 2013).

generally restrict users, they also help protect against malicious uses of data that may harm user experiences.¹¹⁵

Click-through agreements formatted to give sufficient notice to users are generally found enforceable by courts.¹¹⁶ But it is important for a data host to properly format the TOU for it to be binding.¹¹⁷ A data host should implement a click-through agreement that requires an affirmative action by users instead of a “browse wrap” that users can passively ignore.¹¹⁸ Generally, it is important to display the terms prominently and avoid terms granting unilateral amendment powers. Click-through agreements should require affirmative action by users that unambiguously signify assent.¹¹⁹ Even without a mandatory click through, websites that clearly display their TOUs may deter scrapers simply by warning that the gathering of data is impermissible.

Data hosts also seek to detect when scraping is occurring. Scraping may slow the processing power of websites, directly impair access to a website, or, in rare circumstances, crash a website or server.¹²⁰ Although this heavy-handed scraping is less common, hosts can monitor the reposting of their website data to detect commercial competitors that use a website’s data for their own commercial ends. Online guides teach data hosts how to track republication of specific kinds of data.¹²¹ For example, scrapers use

115. Contractual violations of TOUs have been alleged against bots that harm user experiences. *See* MDY Indus., LLC v. Blizzard Entm’t, Inc., 629 F.3d 928, 954 (9th Cir. 2010) (bringing suit against a bot that allowed for automated World of Warcraft gameplay); Ticketmaster L.L.C. v. RMG Technologies, Inc., 507 F. Supp. 2d 1096, 1102 (C.D. Cal. 2007) (bringing suit against a bot that allowed purchasing of tickets before other customers).

116. Courts are willing to enforce click-through agreements so long as they conform to basic contract law principals such as consideration and intent to be bound. *See* Register.com, Inc. v. Verio, Inc., 356 F.3d 393, 403 (2d Cir. 2004). A survey of many such cases finds no cases where click-through agreements were found unenforceable; it is even accepted by courts that users are unlikely to read click-wraps and that this does not limit their enforcement. *See* Mark A. Lemley, *Terms of Use*, 91 MINN. L. REV. 459 (2006).

117. In the *Zappos* case, the TOU was overbroad and reserved a full right to modify the TOU at any time. The court found this TOU ineffective. *See In re Zappos.com, Inc., Customer Data Sec. Breach Litig.*, 893 F. Supp. 2d 1058 (D. Nev. 2012).

118. For a more thorough discussion of the mistakes Zappos made, as well as an overview of what data hosts should do to bind users, see Eric Goldman, *How Zappos’ User Agreement Failed in Court and Left Zappos Legally Naked*, FORBES (Oct. 10, 2010, 12:52 PM), <http://www.forbes.com/sites/ericgoldman/2012/10/10/how-zappos-user-agreement-failed-in-court-and-left-zappos-legally-naked>.

119. *See id.*

120. *See* Angwin & Stecklow, *supra* note 11.

121. Bloggers that use Blogspot can use the host website data metrics to track scraping of their posts. This tracking can include easy-to-use Google alerts, RSS feeds, and other aggregation tools. User-friendly guides instruct bloggers how to prevent and even monetize

automated processes or bots that gather data at rates far faster than humans. These data usage spikes make it fairly easy for data hosts to determine which IP addresses are scraping data from the site.¹²²

Once data hosts are aware that scraping is occurring, they can take simple steps to stop scrapers. Data hosts can send cease-and-desist letters to the scrapers and may restate portions of the TOU that have potentially been violated.¹²³ Cease-and-desist letters put the scraper on legal notice of any alleged violations.¹²⁴ The data hosts may also take a variety of technological measures to deny access, including blocking the IP addresses that are gathering the data.¹²⁵ Data hosts can then bring legal claims against scrapers. If a scraper is accessing content that contains underlying intellectual property rights, violates a data host's TOU, or harms the data host during acquisition, the scraper will likely lose in court.

Data hosts can increase control of their data by establishing prophylactic defensive measures against scraping, vigilantly detecting scrapers, and bringing legal and technological action when scraping has been detected. With these measures data hosts have been generally successful in actions against scrapers, though the success of legal claims are dependent upon the underlying IP protection in the data and proper implementation of defensive measures, such as TOUs and click-through agreements. Yet before bringing any of these claims, a data host should also consider the scraper's intended use for the data. As discussed in Part II, *infra*, the data host should only exercise these legal options if scrapers seek to challenge the data host's business model parasitically and not to augment it mutualistically.

scraping of their content. See Kristi Hines, *Content Scrapers—How to Find Out Who Is Stealing Your Content & What to Do About It*, KISSMETRICS, <http://blog.kissmetrics.com/content-scrapers> (last visited Jan. 30, 2014).

122. Because bots gather data faster than humans, detection of scraping normally looks at the time interval between data requests from given IP address. These settings can be configured to change the interval timing and to specify a threshold that flags a potential bot or scraper. See IMPERVA, DETECTING AND BLOCKING SITE SCRAPING ATTACKS (2011), http://www.imperva.com/docs/wp_detecting_and_blocking_site_scraping_attacks.pdf; see also John Wagnon, *More Web Scraping—Bot Detection*, DEVCENTRAL (May 22, 2013), <https://devcentral.f5.com/articles/more-web-scraping-bot-detection#.UrPFL2RDt10>.

123. See *Craigslislist, Inc. v. 3Taps, Inc.*, 942 F. Supp. 2d 962, 966–67 (N.D. Cal. Apr. 30, 2013).

124. Goldman, *supra* note 71.

125. Simple Java or PHP code can be used to block target IP addresses. Once again, web guides provide step-by-step instructions that can be followed with a modicum of programming knowledge. See, e.g., *System: Blocking Unwanted Spiders and Scrapers*, THE ART OF WEB, <http://www.the-art-of-web.com/system/block-spiders> (last visited Jan. 30, 2014).

II. FACTORS SUPPORTING DATA HOST ENFORCEMENT

Even in circumstances where data hosts might prevail against scrapers, a nuanced study of the benefits of scraping within the community suggests that scrapers are increasingly mutualistic, adding value to data hosts and users. To maximize potential business opportunities, data hosts should be cognizant of user demands, potential benefits of scrapers, and public relations implications before bringing suits. If the scraper intends to create a service that augments the data host's services, then bringing a suit against the scraper may be shortsighted. If, however, the data host determines that the scraper poses a severe business threat and seeks to supplant or abuse the data host's services, legal action may be warranted.

When scrapers seek to replace or replicate the service offered by the data hosts, the data hosts should consider suing the scraper. Early in the history of online auction sites, a website called Bidder's Edge sought to aggregate online auction data from online auction sites including eBay.¹²⁶ Although users still had to proceed to eBay to buy the items, eBay saw this as a threat to their core business model. And although Bidder's Edge represented only a small percentage of total traffic, the court found that allowing Bidder's Edge to scrape would lead to a slippery slope where others would scrape eBay as well.¹²⁷ Despite aggregating other auction sites, Bidder's Edge represented not an augmentation of eBay's services, but potentially a direct threat. With little competition, eBay was able to become the dominant online auction site. If eBay had not sued, it is possible Bidder's Edge could have offered its own auction-hosting capabilities in the future to challenge eBay.

Parasitic threats from scrapers have also come in the form of challenges to online price discrimination and information control models. Epitomizing the classic dichotomy of "information wants to be free . . . information wants to be expensive," brokerage houses offering exclusive information to preferred customers have struggled to control widespread release of that information.¹²⁸ For example, financial brokerage houses would release early stock tips to preferred customers to create an incentive for using that firm to purchase stocks. Responding to high demand for this information, scraping services began to disseminate those stock tips to outside investors, stymying efforts to preserve the price discrimination model of the brokerage houses.

126. The court found that Bidder's Edge pulling of data from eBay nearly one hundred thousand times per day could constitute a trespass. *See eBay, Inc. v. Bidder's Edge, Inc.*, 100 F. Supp. 2d 1058, 1060 (N.D. Cal. 2000).

127. *Id.*

128. STUART BRAND, *THE MEDIA LAB* 202, 211 (1987).

Even when just one scraper reposted the stock tips, the information lost all of its value. The brokerage houses unsuccessfully sought legal recourse against the data scrapers using misappropriation (and copyright) doctrines.¹²⁹ Furthermore, factual stock tips cannot be easily protected under IP law. The brokerage house must absolutely control their data, or else the preferred information model fails completely. This seems to be a losing proposition: new scraping services can spring up before brokerage houses can shut them all down. Data hosts in this circumstance are unable to prevent parasitic scraping if the incentives attracting new scrapers are too high.

Free rider problems continue to motivate some data hosts to sue, even in the face of overwhelming user demand for cheaper or better services. Nevertheless, to determine the proper amount of permissible scraping, free riding concerns must be weighed against the public benefits of scraping. For example, in online real estate databases, MLS real estate sites continue to resist data-scraping services. MLS services aggregate real estate listing information, allow access to that data for a fee, and tend to drive up competition in rental and housing markets by increasing user information.¹³⁰ MLS sites sue scrapers, claiming the reposting of housing descriptions, pictures, or listing information violates the legal protections that exist in those elements.¹³¹ Data hosts—the MLS services—seek to prevent the scrapers from free riding and reposting the information that they charge for others to access. MLS sites argue scrapers are essentially poaching their work without paying for it. Unfortunately for MLS sites, users want free aggregated listings.¹³² Like brokerage houses, MLS sites may win in court, but user demand will spur the growth of new free MLS sites to replace the old. It is clear that user demand for increased transparency and superior services will continue to drive consumer demand for free MLS services, and many suits by MLS services are still pending.¹³³

129. Brokerage houses failed to protect their data with hot news misappropriation theories. The court found misappropriation required passing off content as one's own, which Fly was not doing. Allowing scraping contingent upon proper attribution also represented a shift away from a commercial assessment of any "free riding." See *Barclays Capital Inc. v. Theflyonthewall.com, Inc.*, 650 F.3d 876 (2d Cir. 2011); see also Anthony Corleto & Scott Smedresman, *Second Circuit Decision in Barclays v. Theflyonthewall.com Sheds Light on Conflict over "Hot News,"* BLOOMBERG L. (SEPT. 13, 2011), <http://about.bloomberglaw.com/practitioner-contributions/second-circuit-decision-in>.

130. See Jennings, *supra* note 15, at 1–3.

131. *Id.*

132. *Id.*

133. MLS sites continue to take action against data scrapers. Their efforts include identifying and blocking scrapers, as well as exercising IP rights against them. See *Industry*

Scraping is often beneficial, and data hosts must realize that user demand may drive change, even when faced with resistance from data hosts. The user value offered by financial aggregators represents just one beneficial application of scraping. At the turn of the century, many large financial institutions were increasingly resistant to the efforts of financial aggregators.¹³⁴ These aggregators created websites, and now apps, that allowed users to view all their financial data in one place instead of having to log into each of their banking, billing, or checking accounts.¹³⁵ Financial institutions aggressively sought to stop the spread of financial aggregators; they feared that, if customers could access their data outside of banking websites, customers would be less likely to use online banking products that benefitted the banks themselves.¹³⁶ Despite this resistance, user demand for efficient and secure financial aggregation was overwhelming.¹³⁷ Customer demand eventually won out and now most major banks offer their own financial aggregation services. Some financial institutions now directly partner with aggregators to provide users with the best possible services. Initial resistance to aggregation has now turned to fierce competition between aggregation services with each bank seeking to provide the best scraping services. Banks are still able to offer online services, and users now benefit from the convenience of having their financial information securely aggregated thanks to partnerships between scrapers and data hosts.¹³⁸ Instead of fighting the development of financial aggregators, data hosts who partnered with the scrapers early on could have gotten ahead of this trend and even attracted new users.

Like data hosts who successfully paired with financial aggregators, data hosts should embrace mutualistic scrapers that seek to improve their underlying services. Internet travel purchased through airline aggregators demonstrates that when data hosts tolerate augmentation by scraping, both users and the data hosts stand to benefit. Before airline aggregators, users were forced to individually compare travel options at each airline's website.¹³⁹ Airline aggregators now scrape data from carrier websites to offer price

Cracks Down on Listing Scraping, REALTOR MAG (Aug. 1, 2013), <http://realtormag.realtor.org/daily-news/2013/08/02/industry-cracks-down-listing-scraping>.

134. Sult, *supra* note 16, at 20.

135. Julia Alpert Gladstone, *Data Mines and Battlefields: Looking at Financial Aggregators to Understand the Legal Boundaries and Ownership Rights in the Use of Personal Data*, 19 J. MARSHALL J. COMPUTER & INFO. L. 313 (2001).

136. *Id.*

137. *Id.*

138. A customer survey indicated that security was a key concern when choosing financial aggregators. *See id.*

139. *See* Phil Cameron, *Internet Travel Purchases*, GPSOLO, May/June 2013, at 48.

comparisons among different travel options,¹⁴⁰ allowing users to find and purchase the cheapest flights and bundle rental cars, hotels, and flights.¹⁴¹ The data hosts, here the airlines that have the fare information, also benefit through increased visibility, advertising, and search engine optimization (“SEO”) that aggregators perform.¹⁴² Importantly, the scrapers are attempting to add value to the airline’s offerings, not to supplant them directly. Aggregators do not actually seek to fly travelers around; they merely make travel purchases easier, earning money from referral fees.¹⁴³ This mutualism benefits both the data hosts—the air carriers—and the scrapers—the airline aggregators.

Yet, despite the apparent value to users, not all airlines have warmed to interacting with scrapers. While larger airlines have generally embraced airline aggregation, some budget carriers have excluded themselves from airline aggregators. These are often budget airlines that seek to keep costs as low as possible.¹⁴⁴ By removing themselves from aggregators, airlines can avoid the

140. Although there are many airline aggregators, as of 2013 Expedia is the largest. *Expedia, Inc. Overview*, EXPEDIA INC., <http://www.expediainc.com/about/> (last visited Mar. 5, 2014). Most operate similarly and many aggregators have paired with each other to offer more comprehensive search options to users. See *About Expedia.com*, EXPEDIA, <http://mediaroom.expedia.com/about-expediacom-180> (last visited Jan. 30, 2014); see also ARTHUR FROMMER, ASK ARTHUR FROMMER: AND TRAVEL BETTER, CHEAPER, SMARTER 1–14 (2009) (passing on detailed knowledge of airline aggregators and pricing models directly to customers as a way to heavily defray the costs of travel); Ed Hewitt, *The Aggregators Are Coming*, INDEPENDENT TRAVELER, <http://www.independenttraveler.com/travel-tips/travelers-ed/the-aggregators-are-coming> (last visited Jan. 30, 2014).

141. Many travel guides now recommend that customers visit aggregators before visiting individual airlines websites. Indeed guides may caution that airlines not listed by aggregators tend to be smaller, limited in scope, or regional. See, e.g., Pete Werner, *How to Beat the High Cost of Airfare*, WALT DISNEY WORLD INFO, <http://www.wdwinfo.com/discounts/beat-high-cost-airfare.htm> (last visited Jan. 30, 2014); see also Ben Mutzabaugh, *A Guide to Booking Air Tickets Online*, USA TODAY (Oct. 23, 2003, 1:32 PM), http://usatoday30.usatoday.com/travel/tips/booking/2003-10-23-airline_x.htm.

142. A travel industry study examined the social media popularity and search engine presence of common aggregators and air travel providers. The study concluded that it was more efficient for aggregators to invest in SEO and many forms of online advertising than air travel providers. Aggregators had the higher incentives to invest in online ads as they seek to attract a broad range of customers, while air travel providers are typically limited by geography and scope and do not benefit from widespread advertising. See *Travel Industry Study*, SEARCHMETRICS (Nov. 2, 2013), available at <http://www.searchmetrics.com/en/white-paper/travel-industry-flights>.

143. Airline aggregators make money when users click through their site and purchase a ticket. The costs of these referral fees are often passed on to the airlines as a cost of being included in the aggregation. See FROMMER, *supra* note 140, at 1–4.

144. Budget carriers, like Southwest, JetBlue, and Ryanair, often have a rocky relationship with aggregators. Aggregators often charge fees that the budget airlines object to, and many budget airlines try and drive revenue solely through their websites, though that

small click-through referral fee charged by the Global Distribution Services that sell fare information to aggregators.¹⁴⁵ Airlines have been successful in removing themselves from aggregators through legal action.¹⁴⁶ Airlines that are not displayed in aggregators do not benefit from the advertising of aggregators, but have more control over the display of their information. Yet trying to drive all ticket sales through a carrier's website can draw the ire of customers and consumer groups.¹⁴⁷ Larger airlines have now largely accepted aggregators, and many contract directly with aggregators to ensure they are offering the best services to their users.¹⁴⁸ The budget carriers are betting that users would rather have marginally cheaper fares instead of the convenience of aggregation. This business decision requires users to make the same value calculation as the airlines: the users must be lured by cheaper prices to take the extra time to visit budget carrier's sites individually. Data hosts weigh the mutualistic benefits of working with scrapers against those costs.¹⁴⁹

Data hosts should also be careful when suing scrapers that are widely popular. Public support can be a decisive factor when deciding to sue; even if data hosts shut down scrapers, new ones will spring up to take their places. This has largely been the case in Craigslist's litigation battles. In *Craigslist*, users directly benefited from the 3Taps and Padmapper map functions.

position may be softening. See Kevin May, *Ryanair Offers Meta Search Engines an Olive Branch*, TRAVOLUTION (Sept. 2, 2008, 10:48 AM), <http://www.travolution.co.uk/articles/2008/09/02/1680/ryanair-offers-meta-search-engines-an-olive-branch.html>.

145. Tom Lee, *The Airline's Ongoing Struggle with Price Aggregation Sites*, TECHDIRT (July 29, 2008, 1:50 AM), <http://www.techdirt.com/articles/20080725/1322411794.shtml>.

146. Southwest has brought suits to be excluded from airline aggregators. See James Peltz, *Southwest Airlines Sues Orbitz Travel Site*, LOS ANGELES TIMES (May 5, 2001), <http://articles.latimes.com/2001/may/05/business/fi-59592>; see also Jennifer Disabitino, *Southwest Sues Orbitz over Flight Information*, CNN (May 8, 2001, 11:34 PM), <http://edition.cnn.com/2001/TECH/industry/05/08/southwest.sues.orbitz.idg>.

147. Ryanair, a budget European carrier, threatened to remove its fares from all third-party sellers and even threatened to rescind tickets that had been purchased through those sellers. See Laura Noonan, *Ryanair Travelers May Lose Bookings*, IRISH INDEPENDENT (Aug. 8, 2008), <http://www.independent.ie/business/irish/ryanair-travellers-may-lose-bookings-2646772.html>.

148. See Christopher Hinton, *US Airways Inks Contract with Expedia*, WALL ST. J.: MARKETWATCH (Jan. 21, 2011, 3:16 PM), <http://www.marketwatch.com/story/us-airways-inks-contract-with-expedia-2011-01-21> (describing the costs to airlines from third-party scrapers).

149. In another example of a data host weighing the benefits of mutualistic scraping, Apple shut down scraping services that helped users find availability of Apple products at Apple stores. See Don Reisinger, *Two Tracker Services Shutter, Following Apple's DMCA Takedown*, CNET (Nov. 6, 2013, 7:45 PM), http://news.cnet.com/8301-13579_3-57611069-37/two-tracker-services-shutter-following-apples-dmca-takedown. Although this undoubtedly helped customers find the products they were looking for, it may have taken traffic away from Apple's site or raised other concerns. See *id.*

Regardless of the outcome, Craigslist has already been the target of public criticism for merely bringing the suits.¹⁵⁰ Although Craigslist is currently prominent in the online classifieds market,¹⁵¹ sufficient public backlash increases the likelihood that a competitor could gain traction. User demand for new services should make data hosts more receptive to efforts from scrapers. The public support for 3Taps and PadMapper reflects user demand for a map service.¹⁵² User demand for new features manifested years ago and could be easily measured by the popularity of Oodle, Listpic, and Flippity.¹⁵³ Yet instead of working with these third-party services, Craigslist mounted a series of expensive lawsuits against them. When faced with a scraping service that enjoys popular support, data hosts should consider more cooperative methods of dealing with scrapers.

Instead of resisting user demand and fighting trends with legal action, data hosts should look to adapt their business models and benefit from scrapers. Scraping typically occurs because there is no easy, or legal, way to access a data host's data. By setting up APIs, data hosts can encourage cooperative scraping and easily control and monitor access to their data.¹⁵⁴ Many large tech companies use APIs to better control third parties who might otherwise scrape their data.¹⁵⁵ APIs may also increase the perception that data hosts are innovative and open to third-party support. If a scraper is problematically scraping data from within an API, it is a simple matter for the data host to revoke access. There are now programming tools that decrease the technological hurdles of using APIs instead of scraping.¹⁵⁶ Data

150. See Mike Masnick, *Disappointing: Craigslist Sues Padmapper for Making Craigslist More Useful & Valuable*, TECHDIRT (Jul. 25, 2012, 7:12 AM), <http://www.techdirt.com/articles/20120724/18071219816/disappointing-craigslist-sues-padmapper-making-craigslist-more-useful-valuable.shtml>.

151. *Craigslist Factsheet*, *supra* note 20.

152. See Nick Bilton, *Disruptions: Innovations Snuffed Out by Craigslist*, N.Y. TIMES: BITS (July 29, 2012, 11:00 AM), <http://bits.blogs.nytimes.com/2012/07/29/when-craigslist-blocks-innovations-disruptions>.

153. ListPic, Oodle, and Flippity all received high web traffic before being shutdown. See *supra* Section I.A.

154. The Google AdWords API encourages developers to use AdWords data creatively, but does so in a way that Google can easily control and monitor. See *AdWords API*, GOOGLE, <https://developers.google.com/adwords/api/index> (last visited Jan. 31, 2014).

155. Google has exerted pressure on those who scrape AdWord data to use the AdWords API instead. See Patrick Keeble, *A Message from Our CEO: Raven to Drop Rankings, Other Scraped Data on Jan. 2*, RAVEN (Dec. 7, 2012), <http://raventools.com/blog/scraped-data-serp-tracker>; see also Sean Smith, *Google Declining API Access of AdWords to Data Scraping Services: No Need to Panic*, @SNSMTH (Dec. 7, 2012), <http://www.snsnth.com/blog/google-declining-adwords-api-access-to-data-scraping-services>.

156. The popular code instruction website Codecademy offers specific courses on how to work with popular APIs. See Ben Popper, *Codecademy Teaches Users to Work With APIs From*

hosts may finally be recognizing the benefits of cooperative scraping despite resistance from older data hosts.¹⁵⁷ Government organizations are also open to the benefits of API implementation.¹⁵⁸ Increased use of APIs by established corporations and government groups is a positive indicator that data hosts are increasingly open to mutualistic relationships with scrapers.

Data hosts should consider mutualistic relationships with scrapers before taking legal action. If properly protected by mandatory click-through agreements and TOUs, data hosts may win against scrapers in court despite public support for scrapers, user demand for new services, or competitive pressures. Yet these factors increase the likelihood that such suits will be ineffective in deterring new scrapers and may upset existing users. Further, an overly litigious data host may fall victim to competitive pressures from other services that are more willing to engage in mutualistic relationships with data scrapers that benefit users. Instead, data hosts should emphasize cooperative scraping and try and encourage services that are beneficial to both users and the data host. Data hosts can benefit from enhanced services and user support by channeling third-party developers and scrapers through APIs.

III. CONCLUSION

Currently, data hosts can mount strong legal defenses to scraping. By carefully controlling scraping in their TOUs, practicing IP-blocking, and sending cease-and-desist letters to scrapers, data hosts can bring strong CFAA claims against scrapers. If the scraping is poorly executed and crashes or impairs the data host's website, the data host will likely have a valid electronic trespass to chattel claim. If the data host owns intellectual property rights in the data they host, the data host can bring compilation copyright claims as well. If the scraper has violated a contractual obligation with the data host, the data host can also proceed on contract claims. These myriad legal claims can overwhelm the legal resources of scrapers and quickly drive them out of business.

YouTube, NPR, and More, THE VERGE (Jan. 9, 2013, 12:00 PM), <http://www.theverge.com/2013/1/9/3855090/codecademy-teaches-users-to-work-with-apis-from-youtube-npr-and-more>.

157. See Dan Woods, *Explaining the API Revolution to Your CEO*, FORBES (Dec. 15, 2011, 6:59 PM), <http://www.forbes.com/sites/danwoods/2011/12/15/explaining-the-api-revolution-to-your-ceo>. See generally DAN JACOBSON, *APIS: A STRATEGY GUIDE* (2011).

158. See *Benefit of APIs*, HOWTO.GOV, <http://www.howto.gov/mobile/apis-in-government/benefits-of-apis> (last visited Jan. 31, 2014).

Yet the legal doctrines involved in scraping suits are in flux. The currently strong claims brought by data hosts may not be on such firm ground in the near future. The CFAA, electronic trespass to chattels, and compilation copyright causes of action have all received recent attention and may be changing doctrinally. Perceived abuse or misuse of the CFAA has led policy makers and lawyers to consider curtailing its use.¹⁵⁹ The requirements for proving an actionable harm for electronic trespass to chattel has increased, and savvy scrapers have learned not to crash websites while scraping.¹⁶⁰ Further, getting users to agree to an exclusive license, which may be required for compilation copyright claims, has generated public outcry against typically sympathetic technology companies.¹⁶¹ It remains unclear if these claims will continue to be as successful, or popular, with data hosts in the future.

Even though data hosts may prevail on legal grounds against scrapers, it may not be in their business interest to simply sue. Suing all scrapers fails to recognize the value that a mutualistic relationship with scrapers can have for a data host; the most business savvy data hosts should seek to guide scrapers to the most beneficial channels possible. Many industries that were initially resistant to scraping now benefit from a mutualistic relationship with them.¹⁶²

Data hosts that accept the valuable role of scrapers in the digital environment stand to benefit from cooperative scraping. By offering API access to their data, data hosts can more easily monitor the scraping that does occur and guide the direction that scraping takes.¹⁶³ Further, promising uses of scraping can be brought in-house if the data host chooses to partner with the scraping service to open up new business models. With the rise of more

159. The CFAA has been prominently featured in two recent tragedies: the tragic suicide of a teen girl following Myspace teasing and the death of technology and privacy activist Aaron Swartz. Prosecutors alleged CFAA claims in both cases, and the use of an anti-hacking law as a prosecutorial tool has drawn substantial public criticism. See Jennifer Steinhauer, *Woman Found Guilty in Web Fraud Tied to Suicide*, N.Y. TIMES, Nov. 27, 2008, at A25; Tim Wu, *Fixing the Worst Law in Technology*, NEW YORKER (Mar. 18, 2013), <http://www.newyorker.com/online/blogs/newsdesk/2013/03/fixing-the-worst-law-in-technology-aaron-swartz-and-the-computer-fraud-and-abuse-act.html>; see also *US v. Drew*, ELECTRONIC FRONTIER FOUND., <https://www.eff.org/cases/united-states-v-drew> (last visited Jan. 31, 2014).

160. The higher standard for an actionable harm for electronic trespass to chattel increases the burden of the data host. See *Intel Corp. v. Hamidi*, 71 P.3d 296 (Cal. 2003).

161. See Masnick, *supra* note 59.

162. Airline and financial aggregators demonstrate potential benefits of working with scraping. See *supra* Part II.

163. See Manfred Bortenschlager, *Leveraging APIs as Part of Digital Strategy*, WIRED (Dec. 17, 2013), <http://www.wired.com/insights/2013/12/leveraging-apis-part-digital-strategy>; see also *Benefit of APIs*, *supra* note 158.

advanced data analytics, data hosts stand to benefit from scraping more so than ever before.¹⁶⁴

Scrapers must still carefully examine their own business models. If a data host perceives a scraper as parasitic, the data host can deny the scraper access to their data and proceed with legal action. Although the data host may face public backlash for discontinuing a popular scraping service, scrapers should focus on adding value for users in a context that does not seek directly to undermine the data host. New data analytics and cooperation between data hosts and third parties offer new possibilities for mutualistic scraping that stands to benefit users, scrapers, and data hosts.

164. Cases have not considered scrapers that are using data to perform complex analytics. It remains unclear how legal regimes will adapt to uses of data that are truly novel. See Jim Snell & Derek Care, *Use of Online Data in the Big Data Era: Legal Issues Raised by the Use of Web Crawling and Scraping Tools For Analytics Purposes*, BLOOMBERG L., <http://about.bloomberglaw.com/practitioner-contributions/legal-issues-raised-by-the-use-of-web-crawling-and-scraping-tools-for-analytics-purposes> (last visited Feb. 13, 2014).

THE INDECENT INTERNET: RESISTING UNWARRANTED INTERNET EXCEPTIONALISM IN COMBATING REVENGE PORN

Jenna K. Stokes[†]

A disturbing new trend is making the modern breakup particularly messy. As the Internet has evolved into a basic necessity and as smartphones make it easier to share intimate media¹ than ever before,² unauthorized distribution of that media—“revenge porn”—is becoming increasingly frequent.³ Angry exes with intimate photos or videos of their former significant others weaponize that media after the breakup by uploading it to the Internet, sometimes alongside the victim’s name and other identifying information.

Revenge porn can originate in a few ways: (1) non-consensual photography or video recording (such as through the use of a hidden camera), (2) consensual photography or video recording that is later stolen (such as by hacking into an individual’s computer or online account where explicit images are stored), and (3) consensual photography or video recording that is intentionally transmitted to an individual.⁴ Because the third form is the most prevalent—eighty percent of cases⁵—and most relevant to the current revenge porn debate, this Note focuses on that subcategory.

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1. This term is borrowed from Derek Bambauer to refer to sexually explicit photos or videos depicting the victim-plaintiff, who is recognizable in the media itself or as a result of accompanying information. See Derek E. Bambauer, *Exposed* 98 MINN. L. REV. (forthcoming 2014) (manuscript at 29), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2315583.

2. One study found that “over half (53.3%) of heterosexual respondents had shared a nude photo with someone else, and nearly three-quarters (74.8%) of LGBT (lesbian, gay, bisexual, and transgender) respondents had done so.” *Id.* at 3.

3. *Id.*

4. See Mary Anne Franks, *Combating Non-Consensual Pornography* 3 (Nov. 20, 2013) (working paper), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2336537.

5. See Heather Kelly, *New California “Revenge Porn” Law May Miss Some Victims*, CNN (Oct. 3, 2013), <http://www.cnn.com/2013/10/03/tech/web/revenge-porn-law-california/index.html>. Further, up to eighty percent of revenge porn was originally photographed by the victim and then transmitted to a partner. *Id.*

The incidence of revenge porn is startling. One researcher found that over twenty percent of survey respondents had been the victims of revenge porn.⁶ These images often find their way to websites that exist specifically to host revenge porn content: “The now-defunct revenge porn site IsAnyoneUp? featured images of thousands of people and, at its height of popularity, received thirty million page views per month.”⁷ In the first three months the site was online, its users uploaded ten thousand images.⁸ Facing the pervasiveness of revenge porn, states have begun to grapple with the question of how to best address it, while victims call for legislation at the state and federal levels.⁹

As revenge porn victims face costly litigation after finding their intimate photos and videos posted online, scholars have suggested a variety of approaches to address this widespread problem. Some argue that federal criminalization is the ideal solution because it relieves victims of the burden of identifying and litigating against the original uploader, instead imposing liability on the web hosts themselves.¹⁰ Proponents of criminalization point out that web hosts in federal criminal cases cannot claim immunity otherwise offered under § 230,¹¹ an exception to the Communications Decency Act (“CDA”) that relieves sites and hosts from civil liability for the illegal acts of their users.¹² Others suggest creating special exceptions to § 230 immunity to allow civil tort liability for websites and hosts in revenge porn cases.¹³

But most proposed civil and criminal solutions to the problem of revenge porn treat the Internet as a unique medium requiring special treatment tailored to revenge porn cases. This “internet exceptionalist” approach encourages the development of internet law as though the web is its own jurisdiction not subject to the existing legal framework.¹⁴ Internet exceptionalism is not inherently intolerable; the Internet is a unique communication medium that can potentially amplify social harms. One must

6. Bambauer, *supra* note 1 (manuscript at 3).

7. *Id.*

8. *See id.*

9. *See, e.g.*, Erica Goode, *Once Scorned, but on Revenge Sites, Twice Hurt*, N.Y. TIMES, Sept. 24, 2013, at A11.

10. *See, e.g.*, Mary Anne Franks, *Why We Need a Federal Criminal Law Response to Revenge Porn*, CONCURRING OPINIONS (Feb. 15, 2013), <http://www.concurringopinions.com/archives/2013/02/why-we-need-a-federal-criminal-law-response-to-revenge-porn.html>.

11. 47 U.S.C. § 230 (2012).

12. *See, e.g.*, Franks, *supra* note 4, at 12.

13. *See, e.g.*, Danielle Keats Citron, *Revenge Porn and the Uphill Battle to Pierce Section 230 Immunity (Part II)*, CONCURRING OPINIONS (Jan. 25, 2013), <http://www.concurringopinions.com/archives/2013/01/revenge-porn-and-the-uphill-battle-to-pierce-section-230-immunity-part-ii.html>.

14. *See infra* Section 1.A, for a history of this framework.

be cautious, however, to avoid using this as a justification for unnecessary reflexive legislation fueled by the challenges of addressing a sensitive social problem. Creating “exceptions to the exception” by amending § 230 to expose websites and hosts to liability for the specific case of revenge porn needlessly complicates the law. Instead, the focus should be on established legal frameworks. Specifically, the existing tort of intentional infliction of emotional distress (“IIED”) is well suited for revenge porn cases.

Part I of this Note outlines the current status of civil solutions to revenge porn and explains the shortcomings of other common civil proposals. Part II describes criminal revenge porn statutes and shows that they are either too narrow to be useful or too broad to be constitutional. Part III argues that current tort law is the best method to address revenge porn and explains the application of the IIED tort to revenge porn cases. Part IV concludes by arguing that we should resist reflexively crafting a new legal framework to address societal problems that are not themselves unique to the Internet.

I. CIVIL SOLUTIONS TO REVENGE PORN

Although criminalization of revenge porn receives a great deal of media attention, the lack of a federal criminal statute, or a state criminal statute in the overwhelming majority of states, means that revenge porn victims have thus far had to rely on civil litigation after discovering that their images have been posted on revenge porn sites. Section 230, which grants websites and web hosts immunity from liability for the acts of their users, is a major hurdle for plaintiffs in civil revenge porn cases, who must instead identify, track down, and sue the original uploader.¹⁵

A. COMMUNICATIONS DECENTRY ACT § 230 AND INTERNET EXCEPTIONALISM

The rapidly self-replicating nature of online revenge porn once it appears on the Internet makes web host liability appealing.¹⁶ However, § 230 shields internet companies from liability for the acts of their users: “No provider or user of an interactive computer service shall be treated as the publisher or speaker of any information provided by another information content

15. Although plaintiffs will likely know to whom they have sent a file, they will need to establish that the defendant was in fact the uploader, rather than perhaps the victim of computer hacking or similar interference by a third party.

16. See Somini Sengupta, “Revenge Porn” Could Be Criminal Offense in California, N.Y. TIMES BITS (Aug. 27, 2013, 8:18 AM), <http://bits.blogs.nytimes.com/2013/08/27/revenge-porn-could-be-criminal-offense-in-california>.

provider.”¹⁷ This immunity is a significant obstacle for victims seeking to prevent the wildfire-like spread of explicit material beyond the initial disclosure because it blocks those victims from suing the websites that host the revenge porn.¹⁸ Some state prosecutors have attempted to persuade Congress to amend the CDA to weaken this immunity.¹⁹

Section 230 reflects the earliest era of “internet exceptionalism”—the idea that the Internet deserves special treatment under the law because it is inherently “different.”²⁰ During the mid-1990s, regulators nurtured the Internet in an effort to build what some hoped would become a media “utopia.”²¹ The statute “is clearly exceptionalist because it treats online providers more favorably than offline publishers—even when they publish identical content.”²² Internet exceptionalism has continued to shape the application of § 230 since its enactment, with the immunity it offers to internet entities broadening over time.

1. *The Origin and Expansion of § 230 Immunity*

Congress added § 230 to the CDA in response to internet service providers’ concerns that they would be held liable for the acts of their users.²³ In 1995, a New York court held in *Stratton Oakmont, Inc. v. Prodigy Services Co.* that Prodigy, an internet service provider, was liable for defamatory comments posted by one of its users because of the company’s significant editorial control and active moderation over the bulletin board on which the comments were posted.²⁴ The editorial control exercised, according to the court, made Prodigy a publisher liable for defamatory material on its website.²⁵ This classification of “publisher” contrasts with the classification of “distributor,” which is a service provider that can only be held liable if it knew or should have known about the defamatory content.²⁶

17. 47 U.S.C. § 230(c)(1).

18. *See* Sengupta, *supra* note 16.

19. *See id.*

20. *See* Eric Goldman, *The Third Wave of Internet Exceptionalism*, in *THE NEXT DIGITAL DECADE: ESSAYS ON THE FUTURE OF THE INTERNET* 165, 165 (Berin Szoka & Adam Marcus eds., 2010).

21. *Id.*

22. *Id.*

23. *See* H. Brian Holland, *Section 230 of the CDA: Internet Exceptionalism as a Statutory Construct*, in *THE NEXT DIGITAL DECADE: ESSAYS ON THE FUTURE OF THE INTERNET*, *supra* note 20, at 189, 191.

24. *Stratton Oakmont, Inc. v. Prodigy Services Co.*, No. 031063/94, 1995 WL 323710, at *7 (N.Y. Sup. Ct. May 24, 1995).

25. *Id.* at *4–5.

26. *Id.* at *3.

The ruling sparked apprehension among internet companies: “Representatives of the online industry argued that the Prodigy decision placed service providers in an untenable position by creating a ‘Hobson’s choice’ between monitoring content and doing nothing, thereby insulating the service from liability.”²⁷ Because the *Prodigy* decision turned on the editorial control the company exercised,²⁸ it essentially discouraged companies from monitoring hosted content in order to be considered a distributor under the law. Following *Prodigy*, and in response to the industry’s concerns, Congress added § 230 to the CDA.²⁹

Since *Prodigy* and the enactment of the CDA, courts have expanded the scope of § 230 immunity.³⁰ In *Zeran v. America Online, Inc.*, the Fourth Circuit read § 230 broadly, holding that America Online could not be held liable for a user’s defamatory speech on its bulletin board.³¹ The court held that distributor liability “is merely a subset, or a species, of publisher liability,” and is therefore also foreclosed by § 230.³² Although the *Prodigy* decision left open the possibility of distributor liability, the court in *Zeran* interpreted the statute to provide immunity to both publishers and distributors, thereby eroding the significance of the editorial control distinction suggested in *Prodigy*.³³

Section 230’s expansion has continued in the years since the *Zeran* decision:

Following *Zeran*, and building on that court’s reading of both the statute and the policies sought to be effected, courts have extended the reach of Section 230 immunity along three lines: (1) by expanding the class who may claim its protections; (2) by limiting the class statutorily excluded from its protections; and (3) by expanding the causes of action from which immunity is provided.³⁴

27. Holland, *supra* note 23, at 191 (internal citation omitted). “Hobson’s choice” refers to a theoretically free choice where only one option is available. Hobson’s Choice, Merriam-Webster, available at <http://www.merriam-webster.com/dictionary/hobson's+choice>.

28. *Prodigy*, 1995 WL 323710, at *4–5.

29. Holland, *supra* note 23, at 191.

30. *Id.*

31. *Zeran v. America Online, Inc.*, 129 F.3d 327 (4th Cir. 1997).

32. *Id.* at 332.

33. *Id.*

34. Holland, *supra* note 23, at 192. Cases contributing to this trend include, among others, *Carafano v. Metrosplash.com, Inc.*, 339 F.3d 1119 (9th Cir. 2003) (extending § 230 immunity to a case including claims for invasion of privacy, misappropriation of the right of publicity, and defamation); *Batzel v. Smith*, 333 F.3d 1018, 1031 (9th Cir. 2003) (holding that selecting and editing portions of content before posting did not make a website operator a content provider); *DiMeo v. Max*, 433 F. Supp. 2d 523, 531 (E.D. Pa. 2006) (finding that the

Section 230 immunity now applies to “[w]eb hosting services, email service providers, commercial websites like eBay and Amazon, individual and company websites, Internet dating services, privately-created chat rooms, and Internet access points in copy centers and libraries.”³⁵ In addition to defamation, immunity applies to these entities for a variety of other claims, including negligent assistance in the distribution of child pornography, misappropriation of the right of publicity, and invasion of privacy.³⁶

As *Zeran* and subsequent decisions have suggested,³⁷ the expansion of § 230 immunity over time, making “many of the norms and regulatory mechanisms present in the offline world . . . effectively inapplicable,” has occurred “not because the very nature of cyberspace makes [the application of offline norms] impossible, or because sovereign law is necessarily ineffective or invalid, but rather because sovereign law has affirmatively created that condition”³⁸ in response to concerns raised by internet companies. The result of this expansion is that online entities receive more favorable treatment under the law than offline companies. Even when these entities are aware of illegal activity and have the means to stop it, they are immune from liability.³⁹ Despite this preferential treatment, however, the Internet has had detractors since the passage of the CDA and § 230.

2. *Modern Internet Policy*

Beginning in the late 1990s, legislators adopted a hardline approach to the Internet and “treated [it] more harshly than analogous offline activity.”⁴⁰ States passed laws banning internet activities despite the legality of their traditional offline counterparts.⁴¹ For example, states banned “internet hunting” as a direct response to the hunting website Live-shot.com, which allowed customers to virtually control a gun on the site’s game farm and shoot real, live animals at the physical farm remotely over the Internet.⁴²

operator of an online forum was simultaneously a provider and a user, both of which qualify for § 230 immunity); *Barrett v. Rosenthal*, 146 P.3d 510, 527 (Cal. 2006) (holding that a newsgroup user could not be held liable for redistributing libelous messages written by a third party); *Doe v. Am. Online, Inc.*, 783 So. 2d 1010, 1017 (Fla. 2001) (allowing § 230 immunity in a child pornography case, noting that the material was analogous to the defamatory content at issue in *Zeran*).

35. Holland, *supra* note 23, at 192.

36. *See id.*

37. *See supra* note 34.

38. Holland, *supra* note 23, at 199.

39. *See id.*

40. *See Goldman, supra* note 20, at 165.

41. *See id.*

42. *See id.*

California Senator Debra Bowen justified the discrepancy between online and offline hunting regulation by suggesting that internet hunting amounted to a video game, and that the lack of skill required was offensive to “legitimate” hunters.⁴³ Despite the soundness of Senator Bowen’s reasoning, it is clear that she conceptualized the Internet as fundamentally different, with these differences calling for a divergence from applicable offline law. Nevertheless, despite the harsher approach to internet regulation during this period, § 230’s immunity provisions remained on the books and continued to shield internet entities from liability.⁴⁴

In more recent years, the trend of internet exceptionalism has continued, with “each new advance in Internet technology . . . prompt[ing] exceptionalist regulations towards that technology.”⁴⁵ For example, the popularity of sites like Facebook has resulted in attempts to pass social-networking laws, such as those requiring user age verification.⁴⁶ Revenge porn, given steam by the proliferation of mobile devices, is one example of an internet “innovation” currently attracting regulatory attention.

3. Roommates.com: *Reining in CDA § 230*

Drawing boundaries around CDA § 230 immunities offered to interactive computer services, the Ninth Circuit declined to grant Roommates.com immunity from housing discrimination claims on the grounds that its solicitation of users’ discriminatory housing preferences amounted to a material contribution to unlawful conduct.⁴⁷ According to the court, “a website helps to develop unlawful content, and thus falls within the exception to § 230, if it contributes materially to the alleged illegality of the conduct.”⁴⁸ In effect, the decision parallels a theory of inducement, in that the solicitation of specific data implicated Roommates.com in the discriminatory conduct.⁴⁹

B. REVENGE PORN AND THE CDA: THE *TEXXXAN.COM* CASE

Despite the immunity that CDA § 230 affords website hosts, some plaintiffs have initiated civil suits against hosts whose sites contained revenge

43. *Id.* at 166.

44. *See id.* at 165.

45. *Id.* at 166.

46. *See id.*

47. *Fair Hous. Council of San Fernando Valley v. Roommates.com, LLC*, 521 F.3d 1157, 1168, 1175 (9th Cir. 2008).

48. *Id.* at 1168.

49. *See infra* note 140 for a brief summary of the arguments that propose the use of the *Roommates.com* holding by revenge porn victims to escape § 230 immunities.

porn. The ongoing *Texxxxan.com* class action lawsuit⁵⁰ is the most widely known civil revenge porn case, generating a great deal of media attention and reinvigorating the public debate over how to address revenge porn.⁵¹ The lawsuit against *Texxxxan.com* and host GoDaddy, filed in the Texas District court for Orange County, draws primarily from an invasion of privacy theory and is “the most aggressive legal action taken against revenge porn thus far.”⁵² Hollie Toups, the lead plaintiff, alleged that an ex-boyfriend uploaded photos she had sent to him while they were dating to the website *Texxxxan.com*.⁵³ She also alleged that other photos she never knowingly transmitted to anyone were taken from her phone or computer and later uploaded to the site alongside her personal information.⁵⁴ Like *Texxxxan.com*, GoDaddy, the site’s web host, argued that it is protected by § 230.⁵⁵ However, despite § 230 immunity, the court denied GoDaddy’s motion to dismiss, holding that revenge porn may be obscenity unprotected by § 230 immunity.⁵⁶ The hosting company is currently in the process of appealing that decision, and the court is expected to take on the constitutional questions raised by the obscenity argument.⁵⁷

50. *Toups v. GoDaddy*, No. D130018-C (Tex. Dist. Ct., Orange Cnty. Jan. 18, 2013).

51. *See, e.g.*, Eric Goldman, *What Should We Do About Revenge Porn Sites Like Texxxxan.com?*, FORBES (Jan. 28, 2013, 1:13 PM), <http://www.forbes.com/sites/ericgoldman/2013/01/28/what-should-we-do-about-revenge-porn-sites-like-texxxxan/>.

52. Jessica Roy, *Two Alleged Underage Victims Sign Onto Revenge Porn Lawsuit Against Texxxxan.com and GoDaddy*, BETABEAT (Feb. 11, 2013, 6:04 PM), <http://betabeat.com/2013/02/two-alleged-underage-victims-sign-onto-revenge-porn-lawsuit-against-texxxxan-com-and-godaddy/>.

53. Plaintiff’s Original Petition for Damages and Class Action Certification, a Temporary Injunction and a Permanent Injunction, *Toups v. GoDaddy*, No. D130018-C (Tex. Dist. Ct., Orange Cnty. Jan. 18, 2013).

54. *Id.*

55. Defendant GoDaddy.com, LLC’s Notice of Motion and Motion to Dismiss Pursuant to Rule 91a of the Texas Rules of Civil Procedure, *Toups v. GoDaddy*, No. D130018-C (Tex. Dist. Ct., Orange Cnty. Mar. 14, 2013).

56. *See* Lorelei Laird, *Victims Are Taking on “Revenge Porn” Websites for Posting Photos They Didn’t Consent To*, ABA JOURNAL (Nov. 1, 2013, 3:30 AM), http://www.abajournal.com/magazine/article/victims_are_taking_on_revenge_porn_websites_for_posting_photos_they_didnt_c/. The court did not issue a statement relating to this decision, made April 17, 2013. Memorandum of Points and Authorities in Support of Defendant GoDaddy.com, LLC’s Notice of Motion and Motion to Amend and Certify the Court’s April 17, 2013 Order for Interlocutory Review at 3, *Toups v. GoDaddy*, No. D130018-C (Tex. Dist. Ct., Orange Cnty. Apr. 29, 2013).

57. *See* Memorandum of Points and Authorities in Support of Defendant GoDaddy.com, LLC’s Notice of Motion and Motion to Amend and Certify the Court’s April 17, 2013 Order for Interlocutory Review at 3, *Toups v. GoDaddy*, No. D130018-C (Tex. Dist. Ct., Orange Cnty. Apr. 29, 2013); Laird, *supra* note 56. For an in-depth discussion of the obscenity issue in the context of criminalization, see *infra* Section II.B.

C. THE SHORTCOMINGS OF SUGGESTED CIVIL SOLUTIONS TO REVENGE PORN

Academics have suggested a variety of civil responses to revenge porn. These suggestions generally call for making changes to existing laws specifically for revenge porn cases and reflect an internet exceptionalist approach. As a result, these suggestions would unnecessarily complicate the law and, generally, do so while only very conservatively broadening the range of victims for whom a given remedy is available. These proposed civil responses are thus inadequate to address the problem of revenge porn.

First, some critics have called for changes to the Copyright Act that would allow victims of revenge porn to sue under its provisions more easily. Derek Bambauer, for example, suggests adding a provision to the Copyright Act that would allow identifiable people pictured in intimate media to block distribution despite not being “authors” under current copyright law.⁵⁸ This change would address a major hurdle for victims who did not take the photos or videos themselves and therefore have no authorship rights under current copyright law. However, because a relatively small subset of revenge porn is not self-photography, this suggestion would expand coverage in a very limited way. The overwhelming majority of revenge porn is self-photography,⁵⁹ and these victims are already able to use copyright law as a remedy because they have authorship rights in their explicit works. Victims, however, have yet to test courts’ willingness to construe authorship in this way for revenge porn cases. According to Professor Mary Anne Franks, “it is not clear how much traction this theory will have in actual cases.”⁶⁰

More importantly, the marginal benefit of Professor Bambauer’s solution muddles existing copyright law. It is difficult to justify, on copyright policy grounds, extending authorship rights to someone pictured in a work but who did not produce it. The goals of copyright law are to “ensur[e] fair compensation for American creators who deserve to benefit fully from the exploitation of their works,” and to “stimulat[e] the creation of new works” in order to promote “the long-term volume, vitality, and accessibility of the public domain.”⁶¹ Expanding authorship to include those pictured in intimate

58. Bambauer, *supra* note 1.

59. See Kelly, *supra* note 5. Eighty percent of revenge porn was photographed by the victim, who would therefore already have authorship rights under existing copyright law. *Id.*

60. Franks, *supra* note 10.

61. S. REP. NO. 104-315, at 3 (1996). The Copyright Clause of the Constitution empowers Congress “[t]o promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.” U.S. CONST. art. I, § 8, cl. 8.

media does not provide a benefit to the creator of a work (the photographer who captured the explicit photo or video), thereby encouraging the production of future works.⁶² It therefore does not serve to fulfill the goals of copyright law. It is arguable that offering authorship rights to victims in these cases would make individuals feel more at ease in participating in the production of intimate works, thereby increasing access to this media as an entertainment source. It stands to reason, however, that individuals wishing to share such works would not be initiating invasion of privacy suits like the victims in *Texxxan.com*.⁶³ Professor Bambauer's proposal, although it would conservatively broaden the applicability of authorship rights in revenge porn cases, is an inappropriate modification to copyright law given the fundamental goals of copyright protection.

Another suggested civil response to the revenge porn problem is that courts should understand the exchange of intimate media to carry with it an implied confidentiality contract, based on an implied "right to be forgotten."⁶⁴ This proposal is an attractive solution because it allows for a clear-cut breach of contract cause of action once revenge porn hits the web. However, this suggestion appears to be little more than a convenient sidestep around the First Amendment, allowing courts to assume that the parties contracted around their free speech rights from the outset.⁶⁵ Further, if the implied contract is thought to be based on the parties' reasonable expectations, it may not always be reasonable to assume confidentiality in the context of sharing images and videos. Certainly, there is no such assumption with other forms of personal media.⁶⁶ Although societal norms may suggest that those who share intimate media likely do not want it shared online, one

62. Although it may seem counterintuitive to want to encourage the production of this type of material, it is a fundamental aim of copyright law to encourage the production of creative works. The focus is on the material itself (here, intimate media), rather than specifically the act of using that material for the purpose of revenge.

63. See Plaintiff's Original Petition for Damages and Class Action Certification, a Temporary Injunction and a Permanent Injunction at 4, *Toups v. GoDaddy*, No. D130018-C (Tex. Dist. Ct., Orange Cnty. Jan. 18, 2013).

64. See, e.g., Robert Kirk Walker, *The Right to Be Forgotten*, 64 HASTINGS L.J. 257 (2012) (arguing that Congress should recognize such a right to address the harm caused by the disclosure of personal data, including intimate media in instances of revenge porn). The "right to be forgotten" has been proposed by European policymakers to give individuals the right to have personal information/data deleted from a website if removal does not interfere with others' rights to free expression. *Id.* at 274.

65. Walker acknowledges that applying the "right to be forgotten" as it exists in Europe would violate the First Amendment. *Id.* at 274–78. He suggests the contractual approach in the United States to overcome this problem. *Id.* at 278.

66. Imagine, for example, breaching an implied confidentiality contract by posting a picture of yourself at dinner with a friend on Facebook.

might also argue that the recipient of such media operated under the assumption that because it was shared with them, the sender was open to sharing it in general. With no obvious limiting principle, implying a confidentiality contract as a rule could easily capture cases where it is inappropriate and override individuals' freedom to contract as they so choose.

Another frequent recommendation is that § 230 should be modified to expose websites showcasing revenge porn to liability. Professor Danielle Keats Citron, for example, argues that a revenge porn website qualifying for § 230 immunity is incompatible with the congressional purpose of the CDA.⁶⁷ According to Citron, “[b]lanket immunity ensures that revenge porn victims have no leverage to press site operators to take down injurious material or retain IP addresses that might enable them to identify wrongdoers.”⁶⁸ Nevertheless, as Citron acknowledges, courts generally have not accepted a reading of § 230 that allows immunity only to “decent” websites.⁶⁹ Instead, Professor Citron suggests, “Congress should . . . adopt a narrow amendment to Section 230, excluding from its safe harbor provisions websites designed to facilitate illegal conduct or are principally used to that end.”⁷⁰ On the other hand, many lawyers and scholars oppose such carve-outs to § 230 as harmful to the protective arena for online innovation created by Congress. As Matt Zimmerman, senior staff attorney at the Electronic Frontier Foundation, has argued, “Going after intermediaries is a really bad idea The entire speech ecosystem ends up suffering because those service providers [would] decide what people can and cannot post, even if it isn’t illegal.”⁷¹ As discussed in greater depth in Part III, adopting such an exception without engaging in the broader debate over whether the Internet has evolved beyond the need for broad § 230 immunity misses the mark.

These proposed civil solutions all endeavor to improve remedies available to victims of revenge porn, but, unfortunately, they also make the same misstep: they treat the social harm caused by revenge porn as being a unique animal by virtue of the Internet’s ability to magnify the scope of the harm. This amplification is cause for concern, but not necessarily new

67. Danielle Keats Citron, *Revenge Porn and the Uphill Battle to Sue Site Operators*, CONCURRING OPINIONS (Jan. 25, 2013, 3:13 PM), <http://www.concurringopinions.com/archives/2013/01/revenge-porn-and-the-uphill-battle-to-sue-site-operators.html>.

68. *Id.*

69. Citron, *supra* note 13.

70. *Id.*

71. See Steven Nelson, *New Federal Legislation Could Take a Nip Out of “Revenge Porn,”* U.S. NEWS & WORLD REPORT (Nov. 21, 2013), http://www.usnews.com/news/articles/2013/11/21/new-federal-legislation-could-take-a-nip-out-of-revenge-porn_print.html.

legislation. As discussed in Part III, because society's objections to revenge porn are rooted in precisely the types of harms that IIED is intended to address,⁷² the development of special laws or exceptions to address revenge porn is unnecessary.

II. CRIMINALIZING REVENGE PORN

The alternative to pursuing changes in civil remedies for revenge porn is criminalization. Criminalization of revenge porn distribution relieves victims of the burden of funding civil litigation and, on the federal level, escapes the problem of § 230 immunity, which does not apply in federal criminal cases.⁷³ Federal criminal statutes could therefore be constructed to allow victims to go directly after a website hosting revenge porn rather than being forced to track down the original uploader as the only option for recourse. In contrast to federal criminal statutes, however, state criminal laws are not included in the exemptions to § 230 immunity.⁷⁴ As a result, they do not carry the benefit of being enforceable against websites. Further, few states have passed criminal revenge porn statutes, making them a viable option for only a small subset of victims.⁷⁵ Although calls for criminal statutes get a great deal of the media attention surrounding the issue of revenge porn, statutory construction and constitutional problems with the laws in place in a handful of states demonstrate that criminalization is not a viable solution.

72. Severe embarrassment is one example. *See infra* note 123 and accompanying text. The IIED tort is intended to address this type of emotional harm. *See* RESTATEMENT (THIRD) OF TORTS: PHYS. & EMOT. HARM § 46 (2012).

73. *See* 47 U.S.C. § 230(e)(1) (2012) (“Nothing in this section shall be construed to impair the enforcement of . . . any other Federal criminal statute.”).

74. *See* 47 U.S.C. § 230(e)(1) (2012) (“Nothing in this section shall be construed to impair the enforcement of section 223 or 231 of this title, chapter 71 (relating to obscenity) or 110 (relating to sexual exploitation of children) of title 18, or any other Federal criminal statute.”) (emphasis added); *Voicenet Commc’ns v. Corbett*, No. 04-1318, 2006 WL 2506318, at *3–4 (E.D. Pa. 2006) (stating that “if Congress had wanted state criminal statutes to trump the CDA as well, it knew how to say so”); Eric Goldman, *47 USC 230 Preempts State Criminal Law—Voicenet Communications v. Corbett*, TECH. & MKTG. L. BLOG (Sept. 4, 2006), http://blog.ericgoldman.org/archives/2006/09/47_usc_230_pree.htm (noting that the general consensus has been that § 230 preempts state criminal liability, and that the Eastern District of Pennsylvania’s decision in *Voicenet* marks the first time a court has directly stated this).

75. *See* CAL. PENAL CODE § 647(j)(4)(A) (West 2013); N.J. STAT. ANN. § 2C: 14-9 (West 2004).

A. EXISTING CRIMINAL REVENGE PORN STATUTES

New Jersey became the first state to successfully criminalize revenge porn in 2004.⁷⁶ The law outlaws “the non-consensual observation, recording, or disclosure of intimate images” and has never faced serious challenge.⁷⁷ As of January 2014, two revenge porn defendants have been prosecuted.⁷⁸

In October 2013, California passed its own criminal statute, under which defendants could face six months in jail and a fine for taking intimate photos or videos of an individual and distributing them without that individual’s consent, with the intent to cause the victim serious emotional distress.⁷⁹ The law only covers cases where the accused was also the photographer and, as a result, misses a large segment of revenge porn: those images taken by the victim and then shared.⁸⁰ In cases where the victim took the photo or video, he or she would need to rely on copyright law, as the author of the work, or pursue other civil causes of action.⁸¹

In 2013, the Florida House of Representatives considered a bill criminalizing revenge porn. The bill, in contrast to the New Jersey and California laws, included as an element of the crime that the revenge porn be disclosed in conjunction with personal information identifying the pictured victim.⁸² Commentators have attributed the bill’s failure in committee to this added element, and to possible First Amendment violations.⁸³

Wisconsin legislators, meanwhile, introduced a revenge porn bill in October 2013 under which those convicted would face up to nine months in jail, a \$10,000 fine, or both.⁸⁴ As introduced, the law would outlaw the distribution of “an image of a person who is nude or partially nude or who is engaging in sexually explicit behavior without the consent of the person,”

76. See N.J. STAT. ANN. 2C: 14-9 (West 2004); Franks, *supra* note 4, at 8–9.

77. Franks, *supra* note 4, at 8–9.

78. See *State v. Parsons*, No. 10-06-01372, 2011 WL 6089210 (N.J. Super. Ct. App. Div. Dec. 8, 2011); Michaelangelo Conte, *Bayonne Man Charged with Posting Nude Photos of Ex-Girlfriend on Internet*, NJ.COM (Oct. 23, 2013), http://www.nj.com/hudson/index.ssf/2012/10/bayonne_man_charged_with_posti.html.

79. CAL. PENAL CODE § 647(j)(4)(A) (West 2013); Franks, *supra* note 4, at 10.

80. As noted above, up to eighty percent of revenge porn falls outside of this category. See *supra* note 5 and accompanying text.

81. See *supra* Part I for a discussion of these options.

82. See S. 946, 2013 Leg., Reg. Sess. (Fla. 2013).

83. See Suzanne Choney, “Revenge Porn” Law in California Could Pave Way for Rest of Nation, NBC NEWS (Sept. 3, 2013), <http://www.nbcnews.com/technology/revenge-porn-law-california-could-pave-way-rest-nation-8C11022538>.

84. Assemb. 462, 2013–2014 Leg., Reg. Sess. (Wisc. 2013), available at <https://docs.legis.wisconsin.gov/2013/related/proposals/ab462>.

regardless of the identity of the original photographer.⁸⁵ The bill most closely resembles the New Jersey law; it does not contain the proposed Florida element that intimate media be disclosed alongside personally identifiable information (such as the victim's name and Facebook link) or the California requirement that the defendant disclose the media with the intent to cause emotional distress.⁸⁶

B. TOO NARROW TO WORK; TOO BROAD TO BE CONSTITUTIONAL

Because of the economic and practical challenges of pursuing a civil revenge porn case—funding litigation, avoiding § 230 immunity, and tracking down the original uploader—some commentators argue for criminalizing revenge porn and shifting the burden of litigation to the government.⁸⁷ However, existing state criminal statutes are problematic beyond being preempted by § 230 immunity.⁸⁸ Criminal statutes seem to fall into one of two categories: overbroad and potentially unconstitutional, or so narrow that they are ineffective for the overwhelming majority of revenge porn cases.

For example, New Jersey's law, despite being described by one commentator as “offer[ing] an extremely promising approach,”⁸⁹ was narrowly written such that it has a peculiar loophole. It offers the discloser of intimate media an affirmative defense if they “posted or otherwise provided prior notice to the person of the actor's intent” to distribute intimate media and did so “with a lawful purpose.”⁹⁰ All a distributor would need to do to

85. *Id.*

86. New York, Georgia, and Texas may soon consider legislation to criminalize revenge porn. See Cathy Reizenwitz, *Revenge Porn Is Awful, but the Law Against It Is Worse*, TALKING POINTS MEMO (Oct. 16, 2013, 9:35 AM), <http://talkingpointsmemo.com/caferevenge-porn-is-awful-but-the-law-against-it-is-worse>. The Virginia House of Delegates is now considering a criminal revenge porn bill. See Jason Spencer, *Bill Would Outlaw “Revenge Porn” in Virginia*, MCLEANPATCH (Dec. 3, 2013, 4:29 PM), <http://mclean.patch.com/groups/politics-and-elections/p/bill-would-outlaw-revenge-porn-in-virginia>. Legislators in Pennsylvania and Rhode Island have expressed their intent to propose bills that would criminalize revenge porn. Karen Shuey, *Pa. Lawmakers Looking to Crack Down on Revenge Porn*, LANCASTER ONLINE (Dec. 15, 2013, 8:32 PM), http://lancasteronline.com/article/local/932000_Pa-lawmakers-looking-to-crack-down-on-revenge-pom.html; Press Release, Rhode Island Department of the Attorney General, Attorney General Kilmartin, Senator Lynch and Representative Lally to File Legislation Prohibiting “Revenge Porn” (Dec. 16, 2013), available at <http://www.ri.gov/press/view/20921>.

87. See, e.g., Franks, *supra* note 4. See *infra* Section II.C for a discussion of litigation cost burden-shifting.

88. See Goldman, *supra* note 74.

89. See Franks, *supra* note 4, at 9.

90. See *id.*; N.J. STAT. ANN. 2C: 14-9 (West 2004). It is unclear what a “lawful purpose” might be, though this may be intended to make clear that professional pornographers uploading their work are not included within the statute.

avoid liability and negate the remedy offered by the statute is announce to the victim his or her intent to turn intimate media into revenge porn before doing so.⁹¹ This is a real concern. For example, a Maryland victim's ex-boyfriend told her in advance that he planned to auction off a CD of her intimate photos on eBay.⁹² In Wisconsin, a victim's ex-boyfriend warned her in advance that he planned to post her nude photos on Facebook.⁹³ Under the terms of the New Jersey statute, these defendants provided their victims with prior notice and would therefore have legitimate affirmative defenses.

California's law, meanwhile, is so narrowly written that it potentially applies to just twenty percent of revenge porn.⁹⁴ Considering the difficulty states face in criminalizing revenge porn, one commentator noted that:

An overbroad criminal law is a threat to the public, runs the risk of being struck down by a court (for violating the First Amendment), or even worse, becomes the basis of questionable convictions and imprisonments. But an overly narrow law—like the final version of the California revenge porn law . . . — is little more than lip service to the harm suffered by victims.⁹⁵

The California law does little to improve victims' remedies, instead requiring the overwhelming majority to turn to civil litigation, just as they would without the criminal law in place. An earlier, broader version of the California law would have amended another portion of the California Penal Code to outlaw the distribution of nude photos without consent and with the intent to cause emotional distress in general, regardless of whether the distributor personally took the photos.⁹⁶ Instead, California legislators

91. See Mark Bennett, *Is New Jersey's Revenge Porn Statute Constitutional?*, DEFENDING PEOPLE (Oct. 16, 2013), <http://blog.bennettandbennett.com/2013/10/is-new-jerseys-revenge-porn-statute-constitutional.html>.

92. Anne Flaherty, "Revenge Porn" Victims Pursue New Laws, but ACLU Urges Caution, BOSTON GLOBE (Nov. 16, 2013), <http://www.bostonglobe.com/news/nation/2013/11/16/revenge-porn-victims-press-for-new-laws/cXQNeLzOcy7oSDTUh3W5fK/story.html>.

93. Nico Savidge, *Law Offers Few Options for Victims of "Revenge Porn,"* GAZETTEEXTRA (Nov. 5, 2013), <http://gazetteextra.com/article/20131105/ARTICLES/131109882>.

94. See *supra* note 5 and accompanying text. The law only applies to cases where the accused was also the photographer or videographer and does not reach those instances of revenge porn where the victim independently photographed or recorded him- or herself and then sent the media to a partner who later distributed it without consent. *Id.*

95. Sarah Jeong, *Revenge Porn Is Bad. Criminalizing It Is Worse*, WIRED (Oct. 28, 2013, 9:30 AM), <http://www.wired.com/opinion/2013/10/why-criminalizing-revenge-porn-is-a-bad-idea/>.

96. See May 7, 2013 Senate amendments to SB 255, available at http://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=201320140SB255. The proposed changes would have amended Section 653.2(a)(2) of the California Penal Code to read:

Every person who, with the intent to cause substantial emotional distress or humiliation, by means of an electronic communication device, and

dramatically cut back the scope of the law such that its final enacted form applies in substantially fewer scenarios.⁹⁷

The constitutional problem with criminalizing revenge porn is that such laws necessarily implicate First Amendment concerns. Consensually recorded intimate media does not seem to fit within the categories of unprotected speech, which include child pornography, false statements of fact, fighting words, obscenity, incitement, solicitation of crime, and threats.⁹⁸ Some have argued that revenge porn does fit within the “obscenity” category and that criminalization is therefore constitutional.⁹⁹ This argument, however, relies on an extension of the relevant case law that precedent does not support.

In *Miller v. California*, the Supreme Court outlined the three-prong obscenity test.¹⁰⁰ The relevant factors for material to be considered obscene and therefore unprotected by the First Amendment under *Miller* are:

without consent of the other person, electronically distributes, publishes, emails, hyperlinks, or makes available for downloading nude images of the other person along with personal identifying information of the other person, is guilty of a misdemeanor punishable by up to one year in a county jail, by a fine of not more than one thousand dollars (\$1,000), or by both that fine and imprisonment.

Id. Note that this proposal, in contrast to the enacted law, would not have required that the uploader/discloser had personally taken the photo. As a result, the final version of the law is considerably narrower than this early version and covers dramatically fewer revenge porn cases. In relevant part, the amended law reads:

Any person who photographs or records by any means the image of the intimate body part or parts of another identifiable person, under circumstances where the parties agree or understand that the image shall remain private, and the person subsequently distributes the image taken, with the intent to cause serious emotional distress, and the depicted person suffers serious emotional distress.

CAL. PENAL CODE § 647(j)(4)(A) (West 2013).

97. See Jessica Roy, *California's New Anti-Revenge Porn Bill Won't Protect Most Victims*, TIME (Oct. 3, 2013), <http://nation.time.com/2013/10/03/californias-new-anti-revenge-porn-bill-wont-protect-most-victims/> (quoting Natalie Webb, Director of Communications for the anti-cyber harassment non-profit Cyber Civil Rights Initiative, as saying that the law “doesn’t really offer meaningful coverage to most victims who have reached out to [the non-profit]”). The bill’s sponsor, Senator Anthony Cannella, has acknowledged this gap in protection in the final bill, stating that “at least we got people talking about it.” *Id.* Victims, meanwhile, have accused California legislators of narrowing the scope of the legislation as a result of victim-blaming. Holly Jacobs, victim and founder of the Cyber Civil Rights Initiative, has said that one of the law’s drafters told her that “people who take intimate self-shots are ‘stupid.’” *Id.*

98. See Eugene Volokh, *First Amendment Exceptions and History*, THE VOLOKH CONSPIRACY (Apr. 20, 2010, 5:28 PM), <http://www.volokh.com/2010/04/20/first-amendment-exceptions-and-history/>.

99. See, e.g., Franks, *supra* note 4, at 16.

100. *Miller v. California*, 413 U.S. 15 (2007).

- (a) [W]hether “the average person, applying contemporary community standards” would find that the work, taken as a whole, appeals to the prurient interest,
- (b) whether the work depicts or describes, in a patently offensive way, sexual conduct specifically defined by the applicable state law; and
- (c) whether the work, taken as a whole, lacks serious literary, artistic, political, or scientific value.¹⁰¹

The Court has not held pornography in general to be obscene. To the contrary, in *Reno v. American Civil Liberties Union*, the Court held that sexual expression that is indecent or offensive to some is not inherently obscene.¹⁰² Instead, pornography must be found to be obscene under the *Miller* test, and such obscenity must be clearly defined by the community: “no one will be subject to prosecution for the sale or exposure of obscene materials unless these materials depict or describe patently offensive ‘hard core’ sexual conduct specifically defined by the regulating state law, as written or construed.”¹⁰³

The Court has not, however, held that transmission of material, such as the act of uploading pornography to a website, can render material obscene if it is not otherwise so under relevant state law. In other words, if a state does not pronounce pornographic images themselves to be obscene, relevant precedent does not support the proposition that the circumstances surrounding the production or transmission of pornography depicting consenting adults are relevant in the First Amendment obscenity analysis. Considering revenge porn obscene thus essentially requires that the material become obscene merely because it is distributed, unless a state outlaws pornography entirely—a framework that the *Miller* test does not support. The Supreme Court in *Miller* gave no indication that obscenity hinges on distribution. To the contrary, the Court emphasized the content of the material, rather than its mass-mailing distribution.¹⁰⁴ Although it is possible

101. *Id.* at 24 (internal citations omitted).

102. *Reno v. Am. Civil Liberties Union*, 521 U.S. 844 (1997).

103. *Miller*, 413 U.S. at 27.

104. *Id.* at 18 (noting that “[t]his Court has recognized that the States have a legitimate interest in prohibiting dissemination or exhibition of obscene material” before going on “to define the standards which must be used to identify obscene material that a State may regulate without infringing on the First Amendment. . . .”). In other words, the Court provided a framework for determining what is obscene and can therefore be restricted by the states, but did not suggest that the distribution of the work itself was a relevant factor in establishing obscenity. This was the case despite that the facts in *Miller* involved mass distribution through the mail. The Court was only concerned with this to the extent that the

that the Supreme Court will uphold criminal revenge porn statutes in the future, the lack of significance the Court attached to transmission or distribution in the obscenity analysis leaves criminal statutes vulnerable to First Amendment challenges.¹⁰⁵

C. THE COSTS OF BURDEN-SHIFTING THROUGH CRIMINALIZATION

Criminalization can relieve victims of the burdens of financing civil litigation. This burden-shifting comes at a cost that is seldom addressed when discussing the merits of criminalization. In describing the global legislative phenomenon of turning immediately to criminalization, Professor Nils Jareborg notes that “[c]riminalization is regularly used as a first resort . . . , partly because a new criminalization does not involve obvious immediate costs that have to be taken into consideration As a result, we have to live with ‘criminal law inflation.’”¹⁰⁶ Because it is difficult to establish the cost of a new criminalization, particularly when comparable criminal statutes in other jurisdictions have been used on just a handful of occasions and therefore offer few data points,¹⁰⁷ it is easy to be dismissive of the reality that there are still costs associated with criminalization. Nevertheless, these costs do exist, and are important to consider when attempting to justify criminalization on the ground that it relieves victims of the cost of litigation.

III. PROPOSED SOLUTION: A SOCIETAL PROBLEM, NOT AN INTERNET PROBLEM

The proposed civil and criminal solutions are similar in that they treat revenge porn as a harm that requires special treatment in the law. This view reflects the internet exceptionalist ideology, discussed in Section I.A, in which “[t]he Internet’s perceived novelty has prompted regulators . . . [to] craft[] Internet-specific laws that diverge from regulatory precedents in other media.”¹⁰⁸ Revenge porn is no exception to the modern trend of attempting

possible exposure of the material to children and unwilling recipients justified the states’ interest in having clear guidance in determining what materials are obscene and can therefore be restricted. *Id.* at 18–19.

105. This remains an undecided question. Although it may be the case that transmission is ultimately relevant in the obscenity analysis, the Court has not incorporated that into the test thus far.

106. Nils Jareborg, *Criminalization as a Last Resort (Ultima Ratio)*, 2 OHIO ST. J. CRIM. L. 521, 524 (2005).

107. New Jersey’s statute, for example, has been used for just two prosecutions as of January 2014. *See supra* note 78 and accompanying text.

108. Goldman, *supra* note 20, at 165.

to regulate each new internet innovation in a unique, Internet-specific way.¹⁰⁹ Although internet exceptionalism is sometimes justified,¹¹⁰ in many cases it reflects “regulatory panic.”¹¹¹ Such a panic is an understandable reaction in the revenge porn context, in light of the proliferation of intimate-media sharing. As Professor Eric Goldman explains, “Unfortunately, emotional overreactions to perceived Internet threats or harms typically trump . . . a rational regulatory process” in which “regulators . . . articulate how the Internet is unique, special or different and explain why these differences justify exceptionalism.”¹¹²

Instead, to avoid reflexively creating Internet-specific laws where they are unnecessary, revenge porn should be evaluated according to the underlying basic harm—the humiliating disclosure of intimate photos without consent. That harm is one that is not unique to the Internet and which is already covered by the intentional infliction of emotional distress tort.¹¹³

A. INTENTIONAL INFLECTION OF EMOTIONAL DISTRESS

The tort of IIED is well suited for application in cases of revenge porn and has already been included in revenge porn suits like the *Texxxxan.com* class action.¹¹⁴ The tort “originated as a catchall to permit recovery in the narrow instance when an actor's conduct exceeded all permissible bounds of a civilized society but an existing tort claim was unavailable.”¹¹⁵ After Professor William Prosser initially outlined and named the tort in 1937, the *Restatement of the Law of Torts* recognized IIED in 1948.¹¹⁶ In its current form, the Restatement describes the tort as follows: “An actor who by extreme and outrageous conduct intentionally or recklessly causes severe emotional harm

109. See *supra* Section I.A for an in-depth discussion of this trend.

110. See Goldman, *supra* note 20, at 167.

111. *Id.*

112. *Id.* at 167.

113. In fact, even the specific concept of revenge porn is not unique to the Internet. In 2007, for example, David Feltmeyer was charged in connection with producing and distributing pornographic DVDs of his ex-girlfriend. Feltmeyer left them on the windshield of cars in his area. *Former Boyfriend Pleads No Contest over Sex DVDs*, CHESTERFIELD OBSERVER (Apr. 25, 2007), <http://www.chesterfieldobserver.com/news/2007-04-25/news/009.html>.

114. See Plaintiff's Original Petition for Damages and Class Action Certification, a Temporary Injunction and a Permanent Injunction at 4, *Toups et al. v. GoDaddy*, No. D130018-C (Tex. Dist. Ct., Orange Cnty. Jan. 18, 2013).

115. RESTATEMENT (THIRD) OF TORTS: PHYS. & EMOT. HARM § 46 cmt. a (2012).

116. See Daniel Zharkovsky, “*If Man Will Strike, Strike Through the Mask*”: *Striking Through 230 Defenses Using the Tort of Intentional Infliction of Emotional Distress*, 44 COLUM. J.L. & SOC. PROBS. 193, 205 (2010).

to another is subject to liability for that emotional harm and, if the emotional harm causes bodily harm, also for the bodily harm.”¹¹⁷

In practice, the application of IIED can be reduced to an analysis of the outrageousness element.¹¹⁸ Predictably, it is the muddiest part of the tort: it “is a naturally imprecise term, but this lack of precision is also a virtue of the tort, allowing it to evolve with changes in time and place” and making the tort one “that reflects social norms.”¹¹⁹ Courts have found “certain extreme practical jokes” to be outrageous, and even words alone have sometimes been found to fit the standard, particularly in cases of employer liability for employees insulting customers.¹²⁰ The tort is more concerned with context than it is with the act alone.¹²¹ Outrageousness under IIED

depends on the facts of each case, including the relationship of the parties, whether the actor abused a position of authority over the other person, whether the other person was especially vulnerable and the actor knew of the vulnerability, the motivation of the actor, and whether the conduct was repeated or prolonged.¹²²

1. *Applying IIED to Revenge Porn*

Although the spread of revenge porn is accelerated through the use of the Internet, the harm is not unique to the Internet, and it is a mistake to treat it as such. Revenge porn is objectionable to society for reasons that are not Internet-specific, but instead grounded in the same moral instincts that support recognition of torts like IIED.¹²³ IIED allows the punishment of “conduct beyond the bounds of decency in a civilized society,”¹²⁴ a category in which revenge porn unmistakably falls. The transmission medium is irrelevant to the type of harm caused by revenge porn. “The choice of

117. RESTATEMENT (THIRD) OF TORTS: PHYS. & EMOT. HARM § 46 (2012).

118. See Zharkovsky, *supra* note 116, at 206 (noting that “[c]ontemporary commentators note that analysis of IIED reduces to one element: the outrageousness of the conduct”).

119. *Id.* at 207 (internal citations omitted).

120. See *id.* at 205.

121. See *id.* at 206 (“More crucial than what a defendant does is an analysis of when and where he or she did it.” (internal citations omitted)).

122. RESTATEMENT (THIRD) OF TORTS: PHYS. & EMOT. HARM § 46 cmt. d (2012).

123. See, e.g., Citron, *supra* note 67 (describing harms including embarrassment and shame, reputational damage, and incitement of harassment by third parties); Goode, *supra* note 9; Caille Millner, *Public Humiliation over Private Photos*, SFGATE (Feb. 10, 2013, 3:21 PM), <http://www.sfgate.com/opinion/article/Public-humiliation-over-private-photos-4264155.php> (describing public humiliation as a result of revenge porn).

124. Clay Calvert, *Sex, Cell Phones, Privacy, and the First Amendment: When Children Become Child Pornographers and the Lolita Effect Undermines the Law*, 18 COMMLAW CONSPECTUS 1, 42 (2009).

communication medium might affect the magnitude of the harm, but if it is illegal for A to communicate X to B without C's permission, there is no reason to fashion new rules of liability that depend on the mode of communication used."¹²⁵ Although the Internet can magnify the scale of the social harm caused by revenge porn,¹²⁶ the application of IIED to revenge porn victims obviates the need for creating new civil remedies. It is unnecessary to create new law for a new transmission medium when the magnitude of the harm can be considered in applying IIED.

Daniel Zharkovsky suggests that IIED is ideal to address social harms like revenge porn because its "built-in contextual analysis makes it uniquely adept at dealing with bad behavior on the Internet."¹²⁷ Although Zharkovsky takes the additional step of arguing for exposing internet entities to liability rather than uploaders,¹²⁸ his argument that the tort of IIED is particularly well suited to address revenge porn because of its flexibility is useful. Because "outrage is a flexible standard,"¹²⁹ courts can evaluate revenge porn cases independently according to the contextual analysis that application of IIED requires. Rather than rigid criminal statutes such as those described in Part II, applying the adaptable outrageousness standard through IIED would take into account the relationship between the parties, the expectations of each as to sharing intimate media, and, perhaps most importantly, current social norms. In an environment as rapidly changing as the Internet, with entire social networks breaking to the forefront seemingly overnight,¹³⁰ taking into account social norms is an important task. Applying the existing IIED tort allows courts to do this without crafting any new Internet-specific law,¹³¹

125. Alex Kozinski & Josh Goldfoot, *A Declaration of the Dependence of Cyberspace*, 32 COLUM. J.L. & ARTS 365, 372 (2009).

126. See Zharkovsky, *supra* note 116, at 195 (stating that "[t]he Internet . . . is not reined in by social restraints or physical limitations").

127. *Id.* at 207.

128. See *id.* at 195–96.

129. *Id.* at 206.

130. See, e.g., SNAPCHAT, <http://www.snapchat.com> (last visited Feb. 9, 2014). Snapchat, a mobile application that allows users to send photos and videos that disappear from recipients' phones after several seconds, started as a Stanford student's school project in mid-2011 and was met with great skepticism. See J.J. Colao, *Snapchat: The Biggest No-Revenue Mobile App Since Instagram*, FORBES (Nov. 27, 2012, 1:36 PM), <http://www.forbes.com/sites/jjcolao/2012/11/27/snapchat-the-biggest-no-revenue-mobile-app-since-instagram/>. As of November 2013, Snapchat now handles 400 million photos and videos daily. Jon M. Chang, *70 Percent of Snapchat Users Are Women*, ABC NEWS (Nov. 21, 2013), <http://abcnews.go.com/Technology/70-percent-snapchat-users-women-ceo/story?id=20964409>.

131. The IIED tort is available in all states. See John J. Kircher, *The Four Faces of Tort Law: Liability for Emotional Harm*, 90 MARQ. L. REV. 789, 806 (2007).

instead addressing the social harm through the tort law mechanisms already established to regulate behavior in society. Although this flexibility could also chill speech to the extent that it does not clearly set the boundaries of acceptable social behavior in the same way that a criminal statute does, this risk is a compromise already made in the acceptance of the tort of IIED in general.

In addition to the tort's contextual adaptability, the tort is accessible to victims seeking recourse. All states have recognized IIED in some form.¹³² This universality is significant, given that copyright law requires authorship rights and criminal statutes have only been passed in a few states.¹³³ IIED provides all victims with an available cause of action even in the absence of a criminal statute or modifications to civil remedies, and victims can be awarded damages in every state.¹³⁴

Like the state criminalization proposals discussed in Part II, using IIED to address revenge porn does not avoid triggering § 230 immunities. Additionally, victims still face the problem of needing to sue the original uploader directly, unless victims prove successful in using the inducement-like reasoning of the Ninth Circuit's *Roommates.com* decision to open up revenge porn websites to civil liability. Criminalization suffers from serious statutory construction issues such that statutes have bizarre loopholes that severely restrict their applicability, or are so broad that constitutional challenge appears likely.¹³⁵ Rather than forcing victims to fight these constitutional battles or accept criminal statutes that are "little more than lip service to the harm suffered,"¹³⁶ IIED offers a civil remedy that carries with it ample precedent to guide courts in balancing constitutional rights and victims' interests.

As described in Part I, some have argued that the inability to sue a revenge porn website is cause for poking holes in § 230 immunities to make it easier for victims to go directly after the hosting websites.¹³⁷ It may be the case that § 230 immunity is outdated and inappropriate for the modern Internet.¹³⁸ Nevertheless, choosing to poke holes in § 230 protections for the

132. *See id.*

133. *See supra* Section II.A.

134. *See* Carmen Naso, *Sext Appeals: Re-Assessing the Exclusion of Self-Created Images from First Amendment Protection*, 7 CRIM. L. BRIEF 4, 25 n.191 (2011).

135. *See supra* Section II.B.

136. *See supra* note 78 and accompanying text.

137. *See, e.g.,* Citron, *supra* note 67.

138. For an example of this argument, see Matthew J. Jeweler, *The Communications Decency Act of 1996: Why § 230 Is Outdated and Publisher Liability for Defamation Should Be Reinstated Against Internet Service Providers*, 8 PITT. J. TECH. L. & POL'Y 3 (2008).

specific case of revenge porn is a form of internet exceptionalism in and of itself. Revenge porn exceptions to § 230 immunity would introduce an additional level of exceptionalism rather than getting at the underlying argument that the Internet has “aged out” of the need to protect web hosts in order to encourage rapid innovation and growth.¹³⁹ If we are to say that the problem is not merely the disclosure of the photos, but that websites can host them while retaining immunity under § 230, then it is time to evaluate the value of the internet exceptionalist statute as a whole, rather than create exceptions for special case scenarios without engaging in that broader debate.¹⁴⁰

Unlike IIED, suggestions like Professor Bambauer’s recommendation that copyright law be modified to broaden authorship rights to those pictured in explicit photos or videos escape the problem of § 230 immunity without the need to amend the CDA.¹⁴¹ Nevertheless, as discussed in Section I.B, such a modification is insincere to the fundamental goals of copyright law.¹⁴² It is important to consider the possibility that making a special modification to copyright law for revenge porn could have unforeseen consequences for the legitimacy of copyright law as a mechanism to reward authors for developing creative works.

Unfortunately, using IIED to address revenge porn comes at the cost of restricting victims’ ability to civilly sue web hosts and, unlike criminalization, does not relieve victims of the financial burden of civil litigation.

139. See, e.g., David Thompson, *The Communications Decency Act of 1996 Meets the Closed Frontier*, THE VOLOKH CONSPIRACY (June 8, 2010, 12:15 PM), <http://www.volokh.com/2010/06/08/the-communications-decency-act-of-1996-meets-the-closed-frontier/> (noting that “many think that [§ 230] has run its course” and believe that “the Internet has matured and no longer needs a special exemption from offline law”).

140. Meanwhile, there are some signs that plaintiffs could use an inducement theory to escape CDA § 230 immunity without the addition of a new, revenge porn-specific exception, though such an approach does not yet appear to have caught on. This theory originates from *MGM Studios Inc. v. Grokster*, where the Supreme Court held that the distributor of peer-to-peer file-sharing software could be held liable for inducing copyright infringement as a result of the distributor’s promotion of the infringing use. 545 U.S. 913 (2005). For an application of this theory, see Zharkovsky, *supra* note 116, at 229–30 (suggesting the application of the Ninth Circuit’s *Roommates.com* analysis to hold websites liable). See also Eric Goldman, *Two 47 USC 230 Defense Losses—StubHub and Alvi Armani Medical*, TECH. & MKTG. L. Blog (Apr. 29, 2009), http://blog.ericgoldman.org/archives/2009/04/two_47_usc_230.htm (describing *NPS LLC v. StubHub, Inc.*, No. 06-4874-BLS1, 2009 WL 995483 (Mass. Super. Ct. Jan. 26, 2009) as “the first case to expressly link the *Grokster* ‘inducement’ standard with a possible 230 exclusion”); Zac Locke, *Asking for It: A Grokster-Based Approach to Internet Sites That Distribute Offensive Content*, 18 SETON HALL J. SPORTS & ENT. L. 151 (2008) (arguing for the application of the *Grokster* inducement test to the CDA).

141. See *supra* Section I.C.

142. See *supra* notes 61–62 and accompanying text.

Nevertheless, IIED achieves the overarching goal of punishing revenge porn uploaders and addresses the harms caused by revenge porn¹⁴³ without the need for new law. The use of IIED also provides courts with relevant precedent to rely on in balancing constitutional rights and victims' interests rather than needlessly requiring that courts trudge a new and uncertain path. The act of sharing private intimate media without consent reflects a broader societal problem that reaches beyond the Internet, and it should be addressed as such through the existing tort of IIED.

IV. CONCLUSION

Revenge porn is a difficult issue to address. It is troublesome to suggest that victims ought to continue to be limited to the costly and difficult civil remedies already available when it is easy to empathize with the ramifications of revenge porn in victims' lives. Nevertheless, regulatory panic is an inappropriate response and serves to unacceptably perpetuate unwarranted internet exceptionalism. The existing legal framework already provides an appropriate, flexible cause of action that is suitable for revenge porn cases—IIED. It may be time to evaluate the appropriateness of § 230 in general, but that process is one that should consider the statute's purpose and the Internet's maturity as a whole, rather than haphazardly chipping away at the immunity it offers as a knee-jerk reaction to a difficult, emotionally charged problem.

143. *See supra* note 123.

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REBUILDING BRIDGES: ADDRESSING THE PROBLEMS OF HISTORIC CELL SITE LOCATION INFORMATION

Mark Daniel Langer[†]

In February 2010, the FBI began a massive manhunt for the two men responsible for over fifteen bank robberies in Arizona and Colorado.¹ When surveillance tapes and eyewitness accounts did not provide the necessary information to identify the suspects and regional law enforcement had been unable to determine their identities,² FBI agents turned to the historic cell site location information (“CSLI”) that cell phone service providers had collected from towers around the banks.³ Using a § 2703(d) court order (“D Order”),⁴ the agents collected nearly 150,000 cell phone numbers that were in the vicinity of four of the banks at the time of the robberies.⁵ Out of this information, the FBI agents quickly isolated the two numbers that reappeared, and by March 11, agents had arrested the two suspects.⁶

This is just one example of how government agents can use historic CSLI in a criminal investigation, but it explains, at least in part, why privacy advocates are concerned.⁷ A court authorized D Order can produce a vast amount of information for government agents. As cell phone technology develops, businesses increase the amount of information they collect, which then increases the amount of information the government can demand. The debate about historic CSLI is far from settled, and this dissonance highlights a meaningful debate regarding the reach of the third-party doctrine.⁸ Further,

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1. See Nate Anderson, *How “Cell Tower Dumps” Caught the High Country Bandits—and Why It Matters*, ARS TECHNICA (Aug. 29, 2013, 5:00 AM), <http://arstechnica.com/tech-policy/2013/08/how-cell-tower-dumps-caught-the-high-country-bandits-and-why-it-matters>.

2. See *id.*

3. See *id.*

4. 18 U.S.C. § 2703(d) (2012). The requirements and justification of D Orders will be discussed in detail *infra* Section I.A.

5. See Anderson, *supra* note 1.

6. See *id.*

7. See, e.g., *In re Historic Cell Site Location Information*, EPIC (Dec. 20, 2013), <https://epic.org/amicus/location/cell-phone-tracking>.

8. See *infra* Part I.C.

given recent developments that have challenged and minimized the usefulness of other criminal investigatory tactics like GPS tracking,⁹ government agents are likely to fight for their ability to collect CSLI against demands for reform.

Yet, a spirited discussion of reform still surrounds the government's use of D Orders to obtain historic CSLI, as many reformers and legal scholars argue that the government is reaching too far into the lives of individuals.¹⁰ However, many of the potential solutions to this problem face considerable obstacles: the Supreme Court seems hesitant to act;¹¹ Congress is considering a number of reforms, but these might not be successful in the present political environment;¹² and state legislatures, although often more willing to protect privacy, are not equipped to provide adequate protection from government agents.¹³

Using a recent Fifth Circuit opinion to present these issues, this Note begins by discussing the background to this area of criminal surveillance law. It then seeks to shift the focus away from specific technologies and toward the parties caught up in the debate, arguing that the goal of reformers should be to develop better relationships among the government, businesses, and individuals. Strengthening these relationships would foster an environment better suited to face the future problems that technology will pose—specifically on historical cell site location information.

Part I of this Note provides background information on the key criminal surveillance laws, the Electronic Communications Privacy Act (“ECPA”) and the Stored Communications Act (“SCA”); the technology behind and use of historic CSLI; and the development of the third-party doctrine. Part II delves into the recent Fifth Circuit opinion on the constitutionality of using a court order, instead of a warrant, to collect historic CSLI from service providers. It then discusses the criticism of the government's expansion of the third-party doctrine with historic CSLI and the potential harms to the individual and the

9. See *United States v. Jones*, 132 S. Ct. 945, 949 (2012) (holding that placing a GPS tracker on defendant's car qualified as a trespass).

10. See, e.g., Susan Freiwald, *Cell Phone Location Data and the Fourth Amendment: A Question of Law, Not Fact*, 70 MD. L. REV. 681, 702–705 (2011); Erin Murphy, *The Case Against the Case for the Third Party Doctrine: A Response to Epstein and Kerr*, 24 BERKELEY TECH. L.J. 1239 (2009); Lior J. Strahilevitz, *Toward a Positive Theory of Privacy Law*, 126 HARV. L. REV. 2010 (2013); Stephanie K. Pell & Christopher Soghoian, *Can You See Me Now?: Toward Reasonable Standards for Law Enforcement Access to Location Data that Congress Could Enact*, 27 BERKELEY TECH. L.J. 117 (2012).

11. See *infra* Section III.B.

12. See *infra* Section III.C.

13. See *infra* Section III.D.

relationships between government agents, businesses, and individuals arising from such an expansionistic view. Part III describes the search for a solution and the merits of the various avenues for reform. Part IV outlines a number of ways to use historic CSLI reform to balance these relationships and provide a healthier environment for future technological developments.

I. BACKGROUND

To assess the Fifth Circuit opinion in *In re Application of the United States of America for Historical Cell Site Data* (“*In re Cell Site*”),¹⁴ its criticism, and potential solutions, a basic understanding of the applicable law and technology is necessary. This Part discusses the statutory framework of ECPA, the technology behind CSLI, and the third-party doctrine, which constitute the core of *In re Cell Site*.

A. THE ELECTRONIC COMMUNICATIONS PRIVACY ACT

ECPA provides structure and unification to how government agents treat electronic information. It consists of three parts: the Wiretap Act,¹⁵ regulating the interception of electronic communication; the Pen Register Act,¹⁶ regulating the collection of telephone metadata; and the Stored Communications Act,¹⁷ regulating the collection of information in electronic storage. ECPA regulates how government agents can collect such information, providing varying levels of protection for each different type of information.

Although much of ECPA has met criticism, the SCA is the source of some of the most heated debates.¹⁸ The Stored Communications Act, as the name implies, covers electronic communications that are stored by a service provider, including the substantive content such as emails and non-substantive content like email metadata.¹⁹ The SCA, in § 2703, sets out the

14. *In re Application of the United States of America for Historical Cell Site Data*, 724 F.3d 600 (5th Cir. 2013) [hereinafter *In re Cell Site*].

15. 18 U.S.C. §§ 2510–2522 (2012).

16. 18 U.S.C. §§ 3121–3127 (2012).

17. 18 U.S.C. §§ 2701–2712 (2012).

18. It goes without saying that at least certain parts of ECPA are in need of reform. As the Electronic Frontier Foundation notes, Attorney General Eric Holder also supports reform. See Nate Cardozo & Mark M. Jaycox, *Even Attorney General Eric Holden Supports ECPA Reform*, EFF (May 23, 2013), <https://www.eff.org/deeplinks/2013/05/even-attorney-general-eric-holder-supports-ecpa-reform>. Now, after nearly thirty years, Congress is seriously considering ECPA amendments, particularly to the statute’s treatment of emails. See, e.g., Online Communications and Geolocation Act, H.R. 983, 113th Cong. (2013).

19. 18 U.S.C. §§ 2701–2712 (2012).

general requirements that must be followed for a government agent to compel the disclosure of stored information.²⁰ This information can include electronic communications in storage, electronic communications in a remote computing service, and records concerning either electronic storage or remote computing.²¹ Historical CSLI, as electronic information in the files of service providers, falls under this last category of electronic storage.

18 U.S.C. § 2703(c) provides multiple avenues to compel disclosure of records. The first and most obvious way to compel disclosure would be with a search warrant,²² but the SCA also allows such compulsion with a D Order as laid out in § 2703(d).²³ Section 2703(d) requires that an officer provide “specific and articulable facts showing that there are reasonable grounds to believe that the contents of a wire or electronic communication, or the records or other information sought, are relevant and material to an ongoing criminal investigation.”²⁴ The requirement that the information merely be relevant and material to an ongoing investigation allows government agents to collect a wide array of information. Although not an insignificant hurdle for criminal investigations, it is less than the probable cause requirement of a search warrant or the “super warrant” requirement of the Wiretap Act.²⁵

There are two more elements of § 2703 that bear mentioning, though the Fifth Circuit decision does not discuss them in detail. First, the SCA does not provide a notice requirement for information that government agents produce through § 2703(c).²⁶ Second, government agents may request that a company preserve the records in question pending a court order.²⁷ These elements do not have to do with the justification of a D Order and thus are of less interest with regard to the Fifth Circuit’s opinion. However, these elements will be relevant to the later discussion about how the current legal framework has affected the landscape and potential solutions.

20. § 2703.

21. *Id.*

22. *See* FED. R. CRIM. P. 41.

23. 18 U.S.C. § 2703(d) (2012). For an example of a 2703(d) application and court order, see *Sample 18 U.S.C. §2703(d) Application and Order*, FEDERAL JUDICIAL CENTER, [http://www.fjc.gov/public/pdf.nsf/lookup/CompIn01.rtf/\\$file/CompIn01.rtf](http://www.fjc.gov/public/pdf.nsf/lookup/CompIn01.rtf/$file/CompIn01.rtf) (last visited Feb. 24, 2014).

24. § 2703(d).

25. The Wiretap Act places even more limitations on collection on top of probable cause such as minimizing the amount of intercepted information and requiring that other investigative procedures be tried first. *See* 18 U.S.C. § 2518(3).

26. 18 U.S.C. § 2703(c)(3) (2012).

27. § 2703(f)(1).

B. CELL SITE LOCATION INFORMATION

1. Technology

To discern the potential problems of the use of historic cell site information, it is helpful to isolate it from other geolocational data, especially GPS data. Cell phone service providers collect CSLI whenever a cell phone connects to a cell tower.²⁸ When a cell phone is in contact with a cell tower, both when making and receiving a call, its interaction with the closest cell towers is recorded, thus providing potentially real-time location information about the cell phone holder.²⁹ Unlike a GPS device, a cell phone is not necessarily constantly connected to a cell tower, so reconstructing a suspect's steps is not quite as simple or accurate.³⁰ What is more, the precision of the location information varies from region to region. Cell phone towers can service a cell phone that is up to twenty-one miles away.³¹ However, highly populated areas require many more cell towers to manage the traffic. Thus, populous cities will often have many towers and thus provide more exact geolocational information.³² A cell tower network in some cities can provide a cell phone location accurate to within fifty meters.³³

2. Use

Government agents have been quick to make use of historic CSLI in criminal investigations.³⁴ In part, this is because of the recent holding in *United States v. Jones*.³⁵ In *Jones*, the Supreme Court held that placing a GPS tracking device on a car without a warrant constituted a trespass and therefore was an unreasonable search.³⁶ While the Court specifically avoided the issue of whether the use of GPS tracking, especially in the long term, could qualify as a search, Justices Sotomayor and Alito at least expressed

28. See Freiwald, *supra* note 10, at 702–05.

29. *See id.*

30. *See id.*

31. See WAYNE JANSEN & RICK AYERS, GUIDELINES ON CELL PHONE FORENSICS: RECOMMENDATIONS OF THE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY 63 (Nat'l. Inst. Stand. Technol. Spec. Publ. 800-101, 2007), available at <http://csrc.nist.gov/publications/nistpubs/800-101/SP800-101.pdf>.

32. See Pell & Soghoian, *supra* note 10, at 128.

33. *See id.*

34. See David Kravets, *After Car-Tracking Smackdown, Feds Turn to Warrantless Phone Tracking*, WIRED (Mar. 31, 2012, 5:13 PM), <http://www.wired.com/threatlevel/2012/03/feds-move-to-cell-site-data>.

35. *United States v. Jones*, 132 S. Ct. 945 (2011).

36. *Id.* at 946.

their doubts about the propriety of using tracking technology this way.³⁷ Since *Jones*, the FBI has stopped a large number of its GPS tracking procedures and significantly increased its requests for CSLI.³⁸

CSLI comes in many different categories. First, it can be either prospective or historical.³⁹ Because historic CSLI is information that cell phone providers have already collected and logged, it seems intuitively less problematic than prospective monitoring. Second, CSLI can contain multiple types of information, including, inter alia, initiation information (where the cell phone started a call), termination information (where the cell phone ended the call), and duration information (where the cell phone was throughout the duration of the call).⁴⁰

CSLI can also contain logging information. Government agents can create this information through a pinging process, by calling cell phones just long enough to create a log in a company's records. However, courts might inquire as to whether the government engaged in such a practice before deciding to grant a D Order.⁴¹ In *In re Cell Site*, the government agents asked for all historic CSLI within a certain period,⁴² and the court did not address whether the government agents involved used pinging to increase their information.

C. THE THIRD-PARTY DOCTRINE

In arguing for the constitutionality of using a D Order to disclose geolocation information, both the government and legal scholars rely heavily on the third-party doctrine.⁴³ To understand the third-party doctrine, it is important to first understand its context within Fourth Amendment law. The Fourth Amendment protects “against unreasonable searches and seizures.”⁴⁴ Given the language of the Fourth Amendment, it becomes important to discern what qualifies as an unreasonable search.

37. *Id.* at 957 (Sotomayor, J., concurring); *id.* at 964 (Alito, J., concurring).

38. *See* Kravets, *supra* note 34. It is important to note that the FBI's shift in procedure does not mean that the use of CSLI is as accurate or invasive as the use of GPS tracking devices. Typically a D Order is less controversial and less difficult to procure, thus giving government agents incentive to focus first on CSLI before seeking GPS information under a warrant requirement.

39. *See* Freiwald, *supra* note 10, at 698.

40. *See id.* at 702–705.

41. *See id.*

42. *In re Cell Site*, 724 F.3d 600, 602 (5th Cir. 2013).

43. *See, e.g.*, Brief for the United States at 33–34, *In re Application of the United States of America for Historical Cell Site Data*, 724 F.3d 600 (5th Cir. 2013) (No. 11-20884), 2012 WL 604860.

44. U.S. CONST. amend. IV.

The Supreme Court provided its general test for an unreasonable search in *Katz v. United States*.⁴⁵ In *Katz*, the defendant was convicted of “transmitting wagering information by telephone.”⁴⁶ To catch him, the police attached an electronic recording device on top of a public phone booth he used and monitored his phone calls.⁴⁷ The Supreme Court held that, although this was a public place, Katz had a reasonable expectation of privacy in his communications.⁴⁸ Justice Harlan, in his concurring opinion, fleshed out the reasonable-expectation-of-privacy test.⁴⁹ The test consists of two prongs: (1) whether the individual had a *subjective* expectation of privacy, and (2) whether that expectation of privacy is one that society is *objectively* willing to accept as reasonable.⁵⁰ Justice Harlan argued that the facts of the case satisfied the test, as Katz had the subjective intent, and society recognized an objective expectation of privacy in the phone booth.⁵¹ Since this decision, Justice Harlan’s two-prong test has proven to be the foundational test for unreasonable search claims.

Although *Katz* provides an example of an expectation of privacy that society is willing to consider reasonable, not every expectation of privacy will be reasonable. The third-party doctrine is one instance in which one does not have a reasonable expectation of privacy. The Supreme Court firmly established this doctrine in two cases, *United States v. Miller* and *Smith v. Maryland*.

In *Miller*, the defendant brought a Fourth Amendment challenge against the government’s use of the defendant’s bank records and information.⁵² The Court held that the defendant did not have a protectable Fourth Amendment interest in the bank’s business records.⁵³ Because the bank was a third party, and the business records in question pertained to a transaction of which the bank was a party, the Court held that the bank was able to share the information that the defendant had provided to it.⁵⁴ The Court noted that individuals do not have a reasonable expectation of privacy in information that they provide to third parties.⁵⁵ The Court found this to be true,

45. *Katz v. United States*, 389 U.S. 347 (1967).

46. *Id.* at 348.

47. *Id.*

48. *Id.* at 359.

49. *Id.* at 361.

50. *Id.*

51. *Id.* at 361–62.

52. *United States v. Miller*, 425 U.S. 435, 438–39 (1976).

53. *Id.* at 440.

54. *Id.* at 443.

55. *Id.*

regardless of whether the “information is revealed on the assumption that it will be used only for a limited purpose and the confidence placed in the third party will not be betrayed.”⁵⁶

The Supreme Court continued to bolster the third-party doctrine in *Smith v. Maryland*.⁵⁷ In *Smith*, the government used the information from a telephone company’s pen register to review the phone numbers that the defendant had been calling.⁵⁸ Although the defendant claimed a Fourth Amendment interest in his phone calls and phone call information, the Supreme Court again found no Fourth Amendment protection.⁵⁹ Just like the bank records of *Miller*, the Supreme Court held that an individual voluntarily provided pen register information to the third-party telephone company.⁶⁰ Even if this is information in which the defendant subjectively expected privacy, society was not willing to accept that expectation as reasonable.⁶¹

II. **THE *IN RE*: APPLICATION OF THE UNITED STATES OF AMERICA FOR HISTORICAL CELL SITE DATA DECISION**

A. HISTORY

In October 2010, government agents filed three § 2703(d) applications under the Stored Communications Act.⁶² The applications asked for sixty days of historical cell site data, as well as other subscriber information.⁶³ The magistrate judge granted the request for subscriber information but requested a brief justifying the historical cell site data applications.⁶⁴ After examining the brief, the magistrate judge then declared that under Supreme Court precedent, compelled warrantless disclosure of cell historical cell site data violates the Constitution.⁶⁵ The government brought the case before the federal district court, which also held that the standard under the Stored Communications Act was below constitutional requirements.⁶⁶

56. *Id.*

57. *Smith v. Maryland*, 442 U.S. 735 (1979).

58. *Id.* at 737.

59. *Id.* at 745.

60. *Id.* at 742.

61. *Id.* at 742–44.

62. *In re Cell Site*, 724 F.3d 600, 602 (5th Cir. 2013).

63. *Id.*

64. *Id.*

65. *Id.*

66. *Id.*

B. ANALYSIS

1. *Textual Argument*

Before the Fifth Circuit could decide on the constitutionality of using a D Order for historic CSLI, it had to first address the argument by the American Civil Liberties Union (“ACLU”)⁶⁷ that such an analysis would be unnecessary. Constitutional interpretation issues, especially those surrounding the Fourth Amendment, can be extremely controversial, and court precedent has developed a “canon of constitutional avoidance” that enables courts to avoid interpreting an issue so as to raise a constitutional question.⁶⁸ When applying this canon to statutory interpretation, courts must “first ascertain whether a construction of the statute is fairly possible by which the constitutional question may be avoided.”⁶⁹

The ACLU argued that just such an interpretation was possible, relying upon an interpretation of the SCA that arose in a Third Circuit case on the very same matter.⁷⁰ According to the ACLU, the SCA is ambiguous as to when warrants are required to obtain certain information from third parties.⁷¹ Section 2703(d) states that a D Order “may be issued” by a competent court.⁷² This language is permissive, implying that judges are able to use discretion when providing a D Order. Also, the statute clearly states that an order shall be provided “only if” the government meets the requirements of the D Order, namely, making a specific and articulable showing that the records are relevant to an ongoing criminal investigation.⁷³ The ACLU, and the Fifth Circuit dissent, argued that the best interpretation of this language

67. The ACLU has created a campaign focused on protecting the rights of individuals in the digital age. See *Protecting Civil Liberties in the Digital Age*, ACLU, <https://www.aclu.org/protecting-civil-liberties-digital-age> (last visited Mar. 9, 2014). The issue of warrantless cell phone tracking continues to be an important concern for them. See *Warrantless Cell Phone Location Tracking*, ACLU, <https://www.aclu.org/technology-and-liberty/warrantless-cell-phone-location-tracking> (last visited Mar. 9, 2014).

68. *Clark v. Martinez*, 543 U.S. 371, 381 (2005).

69. *United States v. Sec. Indus. Bank*, 459 U.S. 70, 78 (1982) (internal quotation marks omitted) (quoting *Lorillard v. Pons*, 434 U.S. 575, 577 (1978)).

70. See *In re United States for an Order Directing a Provider of Elec. Comm’n. Serv. to Disclose Records to the Gov’t*, 620 F.3d 304 (3d Cir. 2010).

71. Brief of the American Civil Liberties Union Foundation, the ACLU Foundation of Texas, the Electronic Frontier Foundation, the Center for Democracy and Technology, and the National Association of Criminal Defense Lawyers as Amici Curiae in Support of Affirmance, *In re Application of the United States of America for Historical Cell Site Data*, 724 F.3d 600 (5th Cir. 2013) (No. 11-20884), 2012 WL 1029813, at *8–9 [hereinafter ACLU Brief].

72. 18 U.S.C. § 2703(d) (2006).

73. *Id.*

is that the order “may not issue unless the standard is met.”⁷⁴ If that interpretation is correct, then there might also be times when judges can require more than the minimal specific and articulable facts standard.

Although this interpretation of the statute is not unreasonable, the majority of the Fifth Circuit held that it was incorrect.⁷⁵ The majority focused its interpretation not on “only if” but on the “shall issue” part of the text.⁷⁶ Under this interpretation, the words “may issue” merely permit courts of competent jurisdiction to issue such orders while the phrase “shall issue” compels judges to provide the order if the government can meet the specific and articulable facts requirement.⁷⁷ This argument did not satisfy the dissent,⁷⁸ but it allowed the majority to proceed to the constitutionality issue.

2. *Reasonable Expectation of Privacy vs. Third Party Argument*

Because magistrate judges do not have discretion, the Fifth Circuit had to decide the constitutionality of the D Orders in this context.⁷⁹ It began by noting the two distinct questions that the ACLU and the government addressed. The ACLU looked at *which types of information* are collected and analyzed the D Orders based on Supreme Court’s precedent on tracking devices.⁸⁰ The government looked at *who is collecting* the information and analyzed Supreme Court precedent on business records.⁸¹

Ultimately, the Fifth Circuit concluded that the government approached the issue correctly.⁸² Although the ACLU brought up important concerns with tracking cases such as *United States v. Jones*⁸³ and *United States v. Karo*,⁸⁴ those cases hinged on the fact that the government was the agent collecting the information and tracking the people in question.⁸⁵ With historic cell site data, cell phone companies collect the information as part of ordinary business records. Therefore, the court noted that the Supreme Court’s precedent on third-party business records, such as *Smith v. Maryland* and

74. *In re Cell Site*, 724 F.3d 600, 619 (5th Cir. 2013) (Dennis, J., dissenting).

75. *Id.* at 608.

76. 18 U.S.C. § 2703(d).

77. *In re Cell Site*, 724 F.3d at 608.

78. *Id.* at 616.

79. *Id.* at 608.

80. *Id.* at 609–10.

81. *Id.*

82. *Id.*

83. *United States v. Jones*, 132 S. Ct. 945 (2011).

84. *United States v. Karo*, 468 U.S. 705 (1984).

85. *In re Cell Site*, 724 F.3d at 609.

United States v. Miller, applied. These cases say that as long as the *business* collects the information, the government will be able to use a D Order.⁸⁶

Although this distinction convinced the court, the court discussed two other factors that could potentially influence the third-party doctrine. First, it highlighted the transactional analogy presented in *United States v. Warshak*.⁸⁷ In *Warshak*, the Sixth Circuit held that the government could not compel disclosure of internet service providers' records when they included the content of emails.⁸⁸ In those circumstances, the provider was merely an intermediary between two communicating subscribers, not a party to the transaction.⁸⁹ In *In re Cell Site*, however, the consumer sent the cell site information to the service provider alone, which gave the company every right to both collect the information and provide it to the government. Second, the ACLU expressed concern that consumers did not provide this information voluntarily because they did not know the provider would collect it.⁹⁰ The Fifth Circuit held that cell phone users sufficiently know how their information is collected and use their phones voluntarily.⁹¹ Further, the court noted that even if a consumer's reasonable expectation of privacy had shifted, it would be for Congress to reevaluate the statute, not the courts.⁹²

C. ANALYSIS OF THE FIFTH CIRCUIT DECISION

The third-party doctrine is not without its critics. Although these critics might disapprove of the third-party doctrine in general, like the use of undercover investigators, the use of the historic CSLI demonstrates a new problem that arises as the government applies the third-party doctrine to new types of technology. This Note focuses specifically on how the third-party doctrine is being applied to CSLI. There are two main critiques that apply to the expansion of the third-party doctrine by the Fifth Circuit to historic cell site information, one practical and one doctrinal, and this Section discusses each in turn.

1. *The Practical Critique*

The practical argument against the expansion focuses on one primary aspect of the third-party doctrine: the idea that an individual *knowingly* and

86. See discussion *supra* Section I.C.

87. *In re Cell Site*, 724 F.3d at 611.

88. *United States v. Warshak*, 631 F.3d 266, 286 (6th Cir. 2010).

89. *Id.*

90. ACLU Brief, *supra* note 71.

91. *In re Cell Site*, 724 F.3d at 613.

92. *Id.* at 614–15.

voluntarily supplies her information to a company. In *Smith*, the Supreme Court held that the defendant knowingly released the information.⁹³ It argued that, with early telephones, one would speak directly to an operator, and this operator counted as a third party, just like the bank teller in *Miller*.⁹⁴ Even though telephone companies no longer used human beings as operators, the Court believed that a telephone user would still know that she would be giving the pen register information to the telephone company to make a phone call.⁹⁵

This argument seems to make sense in *Smith*, and the Fifth Circuit held that the same logic holds true with CSLI today. The majority held that cell phone customers should know that their CSLI will be collected and potentially disclosed.⁹⁶ Customers with common sense would probably know that a cell phone company would have to relay their call through the nearest cell tower, thus potentially providing information about their whereabouts.⁹⁷ Even if customers do not know this information, the majority noted that cell phone service providers mention this information collection in their terms of service agreements.⁹⁸

However, this interpretation is not altogether convincing.⁹⁹ First, although the operator analogy used in *Smith* makes sense, as the phone user is speaking directly with another human being, the analogy breaks down as technology gets more and more complex. It is not likely that the average cell phone user understands how call-relay technology works or the types of information that a cell phone service provider might be collecting. Further, it is also not clear that a user should be assumed to know and understand how his or her information is collected because of the information in a contract. In real life, customers often do not read the fine print of the contract terms.¹⁰⁰ Courts are still willing to find these types of agreements valid, as

93. *Smith v. Maryland*, 442 U.S. 735, 742–43 (1979).

94. *Id.* at 745.

95. *Id.* at 743 (“Telephone users, in sum, typically know that they must convey numerical information to the phone company; that the phone company has facilities for recording this information; and that the phone company does in fact record this information for a variety of legitimate business purposes.”).

96. *In re Cell Site*, 724 F.3d at 613.

97. *Id.*

98. *Id.*

99. *See, e.g.*, ACLU Brief, *supra* note 71 (arguing generally against this knowledge and voluntariness assumption).

100. *See* Rainer Böhme & Stefan Köpsell, *Trained to Accept? A Field Experiment in Consent Dialogs*, 2010 PROC. SIGCHI CONF. ON HUM. FACTORS COMPUTING SYS. 2403, 2405 (“More than 50% of the users take less than 8 seconds [to read the entire end user license agreement], which is clearly too short to read the entire notice.”).

well as click-through or shrink wrap agreements, because it is of a practical necessity for contract law and helps both parties create the transaction they want.¹⁰¹ But with the risk of potential criminal liability instead of merely civil liability, courts should probably be more careful when assuming what a customer does or does not know about how the technology works. This problem will only intensify as technology increases in complexity.

2. *The Doctrinal Critique*

Both Susan Freiwald and the ACLU also argue that the expansion of the third-party doctrine is not supported by recent judicial decisions. They point to Justice Sotomayor's concurring opinion in *United States v. Jones*, where she noted that the third-party doctrine should not have the same role today as it did in days of simpler technology.¹⁰² These scholars also look to the Sixth Circuit's decision in *Warshak*.¹⁰³ In *Warshak*, the Sixth Circuit held that subscribers have a Fourth Amendment right of privacy in their emails.¹⁰⁴ This went against the guidelines of the SCA. Critics use these new cases to show a growing trend of reading the third-party doctrine more narrowly than the government's interpretation and being extremely careful when extending the reach of government surveillance through new technological tools.¹⁰⁵

3. *Response to the Third-Party Doctrine Critics*

Although the critics of the third-party doctrine provide strong arguments for why it should not be applied, there are also strong arguments in favor of the doctrine.¹⁰⁶ One of the strongest arguments in favor of the third-party doctrine is its simplicity and technologically neutral nature.¹⁰⁷ The third-party doctrine provides government agents with a clear model for when individuals have a reasonable expectation of privacy. If the information has been given to another person, it loses its reasonable expectation of privacy without need

101. See *ProCD v. Zeidenberg*, 86 F.3d 1447, 1449 (7th Cir. 1996).

102. *United States v. Jones*, 132 S. Ct. 945, 957 (2011) (Sotomayor, J., concurring).

103. *United States v. Warshak*, 631 F.3d 266, 286 (6th Cir. 2010).

104. *Id.* at 283–88.

105. See, e.g., Freiwald, *supra* note 10, at 700–01. The Ninth Circuit had a similar holding against the SCA.

106. Orin Kerr is one of the strongest supporters of the third-party doctrine. In 2009, the Berkeley Technology Law Journal held a symposium that included a discussion of Orin Kerr's work on the third-party doctrine. See Murphy, *supra* note 10; Richard Epstein, *Privacy and the Third Hand: Lessons from the Common Law of Reasonable Expectations*, 24 BERKELEY TECH. L.J. 1199 (2009); Orin Kerr, *Defending the Third-Party Doctrine: A Response to Epstein and Murphy*, 24 BERKELEY TECH. L.J. 1229 (2009).

107. See generally Orin S. Kerr, *The Case for the Third-Party Doctrine*, 107 MICH. L. REV. 561 (2009).

of extensive fact-finding. Also, the third-party doctrine does not favor any specific type of technology. It applies equally to everyone. A problem with most alternatives to the third-party doctrine is that they necessarily focus on some types of technology, be it cell towers and CSLI or GPS tracking. Critics might not have a problem with certain third-party information (like subscriber information, for example), but they do have a problem with certain types of information and specific uses of the information (like the extended tracking issues raised by Justice Alito in *Jones*).¹⁰⁸ Alternatives applying a less universal approach would pose serious problems for government agents, as it simply would not be clear until an appellate court decision just where on the sliding scale of surveillance their actions landed.

D. THE HARMS OF THE CURRENT APPROACH

Assessing the harms of privacy violations is no simple task. By their nature, these types of harms are more ethereal than the average tort or crime. Other articles discuss the harms of privacy violations in-depth,¹⁰⁹ and although a full discussion of the nature of historic CSLI and its potential for misuse exceeds the scope of this Note, two specific types of harms merit discussion. The first type of harm is the archetypal privacy harm: the pervasive effects of government surveillance on individual development and activity. The second harm is the harm to the relationships between the government, businesses, and individuals.

1. *Pervasive Effects of Government Surveillance*

Because privacy harms rarely have an immediate or obvious physical, emotional, or financial impact on an individual, it can be difficult to isolate exactly what the harms are and how they arise. The classic privacy harm derives from the fear of an all-seeing government. Scholars have likened this harm to “Big Brother” from George Orwell’s *1984*, or Bentham’s *Panopticon*.¹¹⁰ In either case, authority figures have complete knowledge of the activities of the individuals under their control, and the knowledge that the government is watching has a profound impact on how individuals go about

108. *United States v. Jones*, 130 S. Ct. 945, 964 (2012) (Alito, J., concurring) (“But the use of longer term GPS monitoring in investigations of most offenses impinges on expectations of privacy.”).

109. See M. Ryan Calo, *The Boundaries of Privacy Harm*, 86 IND. L.J. 1131 (2011) (discussing the types of privacy harms and their effects on the individual). See also Pell & Soghoian, *supra* note 10, at 163–74.

110. See Pell & Soghoian, *supra* note 10.

their daily lives.¹¹¹ Although these examples are perhaps a little drastic, they help flesh out our intuitions about privacy harm and isolate potential harms, though perhaps on a smaller scale.

Unfortunately, these discussions of privacy harms are difficult and often philosophical, and they do not provide a clear and compelling reason why individuals should be concerned about potential privacy risks.¹¹² Although they might not be enough for an individual customer to change his or her mind when purchasing something like a cell phone, it is hard to argue that these privacy fears are completely unjustified. A Big Brother-type government or Panopticon used on innocent people seems intuitively wrong, and the Constitution has protections in place to keep the government from becoming this kind of power.¹¹³

2. *Harm to Relationships Between Government Agents, Businesses, and Individuals*

Proving convincing privacy harm can be difficult, but expanding the third-party doctrine to a broader array of information has also had other effects on society. The current regulatory framework covers three parties: government agents, businesses, and individuals. As technology gets more complex, with companies collecting more information and government agents compelling disclosure of more information, political and economic pressure have begun to fracture these relationships.¹¹⁴

The relationship between government agents and businesses is perhaps the relationship most affected by the expansion of the third-party doctrine and the increasing richness of metadata collection by businesses. As mentioned in Section I.B.2, *supra*, government agents have significantly increased the number of requests for historical CSLI.¹¹⁵ They have also increasingly been cracking down on companies that do not comply with their

111. *Id.* In both of these examples, the authority figures use a lack of privacy to exert control on individuals.

112. See Calo, *supra* note 109.

113. See, e.g., U.S. CONST. amend I & V (including free speech and due process clauses).

114. Clearly this type of harm is not caused solely by the expansion of the third-party doctrine and the government's use of historic CSLI. There are many factors to blame outside of this specific legal area, such as customer apathy, aggression by individuals in the government or business sector, and economic pressures. However, the fact that there are multiple factors to blame for the state of these relationships does not mean that improvements in this area should be avoided. Even if one disagrees that the third-party doctrine and CSLI is the cause of these unhealthy relationships, new approaches to these ideas can still be part of the solution.

115. See Kravets, *supra* note 34.

requests.¹¹⁶ This type of activity shifts the power in favor of government agents and increases the likelihood that a business will surrender customer information without a fight.

At the same time, individuals have no clarity regarding what government agents can do and are doing when it comes to compelling businesses to turn over records. The SCA does not require disclosure of this type of information,¹¹⁷ and as more and more information falls under the SCA, individual customers become increasingly ignorant as to how and when their information is being used. This lack of transparency fosters apathy in individuals, the majority of whom are not aware of how their information is being used, and decreases the possibility that individuals can successfully seek change through a democratic process.

If individuals are ignorant about what government agents are doing, they are just as ignorant about how businesses are collecting and storing their information. This is partly due to the new complexities that arise with technological developments. It is difficult to clearly explain how businesses collect information and how that information might be used.¹¹⁸ However, when paired with the pressure that businesses receive from government agents, businesses lose any incentive to share their businesses practices with customers. Thus, there is a lack of accountability to customers about what types of information a business collects, how it releases that information, and how long it keeps that information. Customers lose any bargaining power or accountability that they might have.

III. THE SEARCH FOR A SOLUTION

As described in Section II.C, *supra*, the government's use of a D Order to obtain historic CSLI has been met with resistance and criticism. Some scholars and judges have provided their own solutions to the problem, most of which fall into a handful of different camps. The first, a direct counter to *In re Cell Site*, would provide magistrate judges with more discretion to decide whether a D Order suffices. Another solution to the problem would be for the Supreme Court to decide on this issue once and for all. Although this

116. See *infra* text notes 156–157 and accompanying text.

117. See *supra* note 26 and accompanying text.

118. For example, when Google and Facebook updated their privacy policies in 2012, a survey found that the changes to the policies were too confusing for customers to understand. *Survey Finds Facebook and Google Privacy Policies Even More Confusing Than Credit Card Bills and Government Notices*, SIEGEL+GALE (Apr. 24, 2012), http://www.siegelgale.com/media_release/survey-finds-facebook-and-google-privacy-policies-even-more-confusing-than-credit-card-bills-and-government-notices.

would provide a more concrete solution, others have argued that any solution should arise under broader ECPA reform. And one final solution is simply for states to decide for themselves what to allow within their borders, which would at least limit the extent of the problem. This Part discusses each of these solutions in turn, outlining the potential solution as well as the pros and cons of each. Two central problems reoccurring in these solutions are that (1) they would each require a dramatic change to the current state of affairs and (2) often their focus is not technologically neutral.

A. MAGISTRATE JUDGE DISCRETION

As mentioned in the discussion of *In re Cell Site*, the text of the SCA allows for multiple interpretations.¹¹⁹ Discounting the argument of the ACLU,¹²⁰ the Fifth Circuit held that the SCA requires that a magistrate judge issue a D Order as long as the government meets the requirements as outlined in § 2703(d). In other words, as long as the government offers “specific and articulable facts showing that there are reasonable grounds to believe that the contents of a wire or electronic communication, or the records or other information sought, are relevant and material to an ongoing criminal investigation.”¹²¹ However, the Third Circuit decided a similar case differently.¹²² According to the Third Circuit, § 2703 allows for discretion on the part of the magistrate judge.¹²³ The court held that if Congress had meant for judges not to have any discretion, it could have clearly limited their authority.¹²⁴ Such an interpretation could alleviate much of the concern with the government’s use of a D Order to compel historic cell site information. Although the government would still be able to collect historic CSLI without a warrant, there would be an extra layer of protection for individuals in the form of satisfying the magistrate judges’ own standard. This is not as dramatic as requiring a warrant in all circumstances, but it is a step in that direction.

While this solution could potentially provide more protection than the current surveillance regime, it faces some strong criticisms. The first problem is that it eliminates the certainty that government agents have when pursuing

119. *See supra* Section II.B.

120. ACLU Brief, *supra* note 71.

121. 18 U.S.C. § 2703(d) (2012).

122. *See In re United States for an Order Directing a Provider of Elec. Comm’n Serv. to Disclose Records to the Gov’t*, 620 F.3d 304 (2010).

123. *Id.* at 319.

124. *Id.* (“We respectfully suggest that if Congress intended to circumscribe the discretion it gave to magistrates under § 2703(d) then Congress, as the representative of the people, would have so provided.”).

a D Order. No longer will government agents know what will be necessary to receive the information they need because, instead of a clear statutory requirement, they must meet the subjective standard of the particular magistrate judge from whom they are requesting the order. This problem is compounded by the fact that the Third Circuit does not provide a standard for the magistrate judges to evaluate when to require a warrant in place of a D Order.¹²⁵ Some, if not most scholars, would agree that the limitations placed on government agents should be clear if they are to be effective.¹²⁶ This type of subjectivity would appear to encourage jurisdiction shopping, assuming that not all magistrate judges have the same penchant for privacy protection.

Judge Dennis, in the dissent to *In re Cell Site*, noted one more problem with giving magistrate judges discretion to require a warrant.¹²⁷ The dissenting opinion focused on the importance of constitutional avoidance.¹²⁸ This doctrine, which has been reinforced by the Supreme Court,¹²⁹ requires courts to avoid constitutional questions when at all possible. The dissent noted that giving magistrate judges discretion would simply move the broad constitutional analysis to a fact-intensive analysis of any particular D Order.¹³⁰ Not only does such a decision ignore the doctrine of constitutional avoidance, Judge Dennis argued that *ex parte* application proceedings provide a poor forum for Fourth Amendment analysis.¹³¹

B. SUPREME COURT ACTION

Another way to address the use of historic CSLI would be through a Supreme Court holding. The Supreme Court could simply decide that the disclosure of location information should require a warrant, not merely a D Order. Given the existing circuit split on this issue, there is a good chance that there also will be circuit splits on other third-party doctrine issues as well. These types of splits might be difficult for the Supreme Court to ignore. A Supreme Court holding could limit the third-party doctrine in multiple

125. *Id.*

126. See Pell & Soghoian, *supra* note 10, at 175; Orin Kerr, *The Next Generation Communications Privacy Act*, 162 U. PA. L. REV. 373 (2013).

127. See *In re Cell Site*, 724 F.3d 600, 617 (5th Cir. 2013) (Dennis, J., dissenting) (desiring a holding “that does not require magistrates to speculate on societal expectations in *ex parte* application proceedings devoid of the concrete investigative facts upon which Fourth Amendment analysis depends”).

128. *Id.* at 616–17.

129. See *id.* (citing *Zadvydas v. Davis*, 533 U.S. 678, 689 (2001)).

130. *Id.* at 630–31.

131. *Id.*

ways. It could limit the disclosure of location information with a warrant requirement, or it could eliminate certain types of information collection by adhering to the mosaic theory of surveillance.¹³²

Unfortunately, those looking to the Supreme Court for an answer to the third-party doctrine, especially as it relates to technological issues like historic CSLI, might have a long wait. In *City of Ontario v. Quon*, the Supreme Court showed that it did not like to use a fact-specific case to develop “far-reaching” technology policy decisions.¹³³ The Supreme Court continued in this vein in *United States v. Jones*.¹³⁴ In *Jones*, the court had the opportunity to take a strong position on long-term GPS tracking.¹³⁵ Although Justice Sotomayor, in her concurring opinion, was critical of the use of long-term GPS surveillance,¹³⁶ as well as the third-party doctrine in a technology setting, the Supreme Court intentionally avoided any specific holding on the subject, instead focusing on the physical trespass committed by the government agents through the surveillance.¹³⁷ It seems apparent that the Supreme Court is hesitant to make the kind of decision that many reformers seek; however, Chief Justice Roberts has mentioned the importance of seeking a solution to the technological challenges now facing the United States.¹³⁸

C. ECPA REFORM

Although there are multiple avenues for reform, much of the scholarly debate has centered around ECPA reform.¹³⁹ Unlike the Supreme Court, which specifically seeks to avoid far-reaching policy decisions in the technology field,¹⁴⁰ Congress has the ability, and arguably the duty, to address these issues. In enacting ECPA in 1986, the Congressional Committee

132. Justice Alito alludes to the mosaic theory in his discussion of long-term surveillance. *United States v. Jones*, 130 S. Ct. 945, 961 (2012) (Alito, J., concurring). This is a separate issue that will not be discussed in full here. However, for an interesting discussion of the mosaic theory, compare David E. Pozen, *The Mosaic Theory, National Security, and the Freedom of Information Act*, 115 YALE L.J. 628 (2005) with Orin S. Kerr, *The Mosaic Theory of the Fourth Amendment*, 111 MICH. L. REV. 311 (2012).

133. *City of Ontario v. Quon*, 560 U.S. 746, 759 (2010).

134. *Jones*, 132 S. Ct. 945.

135. *Id.*

136. *Id.* at 955 (Sotomayor, J., concurring).

137. *Id.* at 946–47.

138. Robert Barnes, *Supreme Court May Rule on Cellphone Privacy*, BOSTON GLOBE (Aug. 11, 2013), <http://www.bostonglobe.com/news/nation/2013/08/10/supreme-court-may-decide-how-private-cellphone-supreme-court-may-decide-how-private-cellphone/PpNnx3uSelQbHteZbSsiKP/story.html>.

139. See Pell & Soghoian, *supra* note 10 (focusing on what a new legislative framework should be); Kerr, *supra* note 126.

140. *City of Ontario v. Quon*, 130 S. Ct. 2619, 2629–30 (2010).

Report noted the importance of Congress's role in ensuring that privacy protections remained in place in the face of technological developments:

The law must advance with the technology to ensure the continued vitality of the fourth amendment. Privacy cannot be left to depend solely on physical protection, or it will gradually erode as technology advances. Congress must act to protect the privacy of our citizens. If we do not, we will promote the gradual erosion of this precious right.¹⁴¹

It seems safe to say that the technological developments surrounding smart phones, including the extended reach of government surveillance, is part of that "gradual erosion." If so, it would appear that Congress not only has the ability, but also the duty to address the issue per its own mandate.

There are two other reasons why congressional reform would be a good approach to this issue. First, any changes to ECPA would not have to be limited to the facts of a case, like a Supreme Court opinion. That means that Congress does not have to wait for a case with perfect facts, and it can address issues as broadly or specifically as it wants. Second, Congress also has the ability to develop a more complete response to technology concerns with a statutory amendment.

Congressional reform might seem like the best possible solution to the technology problem, but it still faces multiple issues of its own. First, Congress has recently been stuck in a stalemate between the government and interest groups. If Congress finds it difficult to find a compromise on a budget even with the threat of government shutdown,¹⁴² it seems unlikely that it will be able to address difficult and controversial privacy issues. This is especially true as current reformers in the debate often present extreme changes to ECPA.¹⁴³ Privacy interest groups are often quite frustrated with the current state of the law and that can lead to demands for dramatic reform. However, this type of dramatic reform will not go without a fight. This is especially true in the area of historic CSLI. Since the Supreme Court's holding in *Jones*, which made the use of GPS tracking more difficult for

141. S. REP. NO. 99-541, at 2 (1986).

142. See Lori Montgomery & Zachary Goldfarb, *President, Congress leave one crisis behind but face long road to budget deal*, WASH. POST (Oct. 17, 2013), http://www.washingtonpost.com/business/economy/president-congress-leave-one-crisis-behind-but-face-long-road-to-budget-deal/2013/10/17/4e4eda14-3767-11e3-ae46-e4248e75c8ea_story.html.

143. See, e.g., Press Release, Senator Rand Paul, Sen. Paul to Introduce Fourth Amendment Restoration Act of 2013 (June 6, 2013), http://www.paul.senate.gov/?p=press_release&id=838. Senator Paul's draft of the Act, which would require a warrant to search the phone records of Americans, is available at <http://www.paul.senate.gov/files/documents/4thAmdtRestoration.pdf>.

government agents,¹⁴⁴ the government's use of D Orders has increased astronomically.¹⁴⁵ It is hard to imagine that the government would allow reform to ECPA's D Orders without a fight.

Furthermore, although Congress has been able to make some specific changes to technological developments in privacy law, such as the Video Privacy Protection Act,¹⁴⁶ these changes have been few and far between. Congress enacted ECPA in 1986, and it has taken nearly thirty years for Congress to consider changing its position on the protection of emails. Although some might take encouragement from the fact that privacy concerns have made headlines recently,¹⁴⁷ it is by no means certain that this will lead to congressional action concerning historical CSLI. If anything, other privacy matters are more pressing, and less difficult, than historic CSLI and geolocation information. If Congress were to pass privacy legislation, it would make sense for it to address these more politically pressing concerns first.

D. STATE-SPECIFIC SOLUTIONS

The federal government is not the only sphere where reformers have sought change in the collection of cell phone location information. In July 2013, the New Jersey Supreme Court unanimously held that law enforcement agents in New Jersey must have a warrant to obtain location information from cell phone providers.¹⁴⁸ This is not the first time that states have led the way in protecting privacy. For example, states have led the way with regard to data breach notification law.¹⁴⁹ Moreover, multiple states have a right to privacy as part of their constitution,¹⁵⁰ whereas the U.S. Constitution does not specifically mention a right to privacy. This constitutional right to privacy could allow more state supreme courts to rule in favor of consumer privacy or more state legislators to pass laws that more strictly enforce privacy rights.

144. *United States v. Jones*, 132 S. Ct. 945 (2012).

145. *See* Kravets, *supra* note 34.

146. Video Privacy Protection Act, 18 U.S.C. §2710 (2006).

147. *See, e.g., Edward Snowden*, THE GUARDIAN, <http://www.theguardian.com/world/edward-snowden> (last visited Feb. 24, 2014) (collecting all of *The Guardian* articles relating to Edward Snowden and U.S. government surveillance leaks).

148. *See* Kate Zernike, *New Jersey Supreme Court Restricts Police Searches of Phone Data*, NEW YORK TIMES (July 18, 2013), available at <http://www.nytimes.com/2013/07/19/nyregion/new-jersey-supreme-court-restricts-police-searches-of-phone-data.html?pagewanted=all>.

149. *See* DANIEL J. SOLOVE & PAUL M. SCHWARTZ, PRIVACY LAW FUNDAMENTALS 171–84 (2d ed. 2013).

150. *See* CAL. CONST. art. I, § 1; MONT. CONST. art. I, § 10.

State privacy solutions could be useful for multiple privacy concerns, but they might not be as successful when it comes to the government's use of historic CSLI. One problem is the nationwide scope of large cell phone companies. Although a state government might not allow agents to force companies in its state to disclose the information, the information might not actually be in the protected jurisdictions. Also, even though some states are willing to bolster privacy protections for individuals, there are many other states, even those that have been strong privacy supporters, which are not likely to make the types of changes seen in New Jersey and Montana.¹⁵¹

It is also important to note that criminal investigations are fundamentally different from state-championed data breach laws, and the reasons why differing data breach laws work might not apply to differing surveillance laws. Much like international privacy law, companies can choose to adhere to the law of the strictest jurisdiction (i.e. the European Commission's 1995 Data Protection Directive for broader information privacy law or California law for data breaches).¹⁵² Once a business has the infrastructure in place to handle stricter requirements, much of the economic incentive for avoiding stricter privacy requirements fades away. However, that sort of economic benefit does not apply in this case. The government has in place the ability to obtain a warrant for historic CSLI, but having the ability does not make it any more desirable to government agents to use the warrant method and overcome its higher burden requirements. Also, it is one thing to expect a business to absorb the cost of privacy protection, but quite another to expect government agents to limit criminal investigations. Finally, having fifty different laws for government agents to follow would reduce the efficiency of criminal investigations, and it would probably be most desirable to keep this reform in a federal forum.

IV. SMALL STEPS: BUILDING AN ENVIRONMENT FOR SUCCESS

Although the previous Part outlines potential solutions to the current government use of historic CSLI, none of these solutions will be an easy

151. See Hanni Fakhoury, *Governor Brown Vetoes California Electronic Privacy Protection. Again.*, EFF (Oct. 1, 2012), <https://www.eff.org/deeplinks/2012/10/governor-browns-vetoes-california-electronic-privacy-protection-again> (noting that in California, Governor Brown vetoed a bill that would require a warrant for locational information).

152. See Directive 95/46/EC, of the European Parliament and of the Council of 24 October 1995 on the Protection of Individuals with Regard to the Processing of Personal Data and on the Free Movement of Such Data, 1995 O.J. (L 281) 31; CAL. CIV. CODE § 1798.82 (West 2014).

answer to the problem, and often for similar reasons. Some of the solutions seek changes that are too extreme or far-reaching. This can be a problem with demanding a Supreme Court holding that will significantly change the current Fourth Amendment doctrine and technology landscape, as well as with seeking a new version of ECPA that would eliminate the third-party doctrine or require warrants for all types of information. Even the idea of giving magistrate court judges discretion in deciding the necessity of warrants for CSLI will necessarily cause a dramatic change in the Fourth Amendment legal landscape. If not too extreme, some of the solutions could be too technologically specific. For example, a Supreme Court ruling on the use of historic CSLI might be helpful for awhile, but such specific holdings might become obsolete as soon as they are made.¹⁵³

No matter what solution, or combination of solutions, reformers manage to implement, there will be one more obstacle: an unhealthy environment based on unhealthy working relationships among the government, businesses, and individual consumers. The relationships among these parties have not fared well under the government's approach to historic CSLI, but the blame for this should not rest solely on government's shoulders. Bolstering the balance of power in these relationships and rebuilding the environment surrounding these third-party doctrine issues are vital for future development. Current solutions addressing issues such as historic CSLI will not be perfect, but any problems they may contain will be exploited in an unhealthy environment. As technology advances, an unhealthy relationship among the parties will only hinder healthy adaptation. This Part takes a closer look at each of the individual relationships.

A. GOVERNMENT AND BUSINESSES

In 2007, Albert Gidari, Jr., gave the keynote address at a privacy symposium at the University of San Francisco Law School.¹⁵⁴ Entitled *Companies Caught in the Middle*, the address presented the perspective of the service providers as they stand on the front lines in the battle for privacy.¹⁵⁵ Since September 11, 2001, government agents have had less patience with service providers.¹⁵⁶ By questioning the government's authority or taking time to consider a government agent's request, companies are at risk of being

153. See *Kyllo v. United States*, 533 U.S. 27, 33–34 (2001) (mentioning the problem of technology changing and holdings becoming obsolete).

154. Albert Gidari, Jr., *Companies Caught in the Middle*, 41 U.S.F. L. REV. 535 (2007).

155. *Id.*

156. *See id.* at 541.

convicted of criminal contempt.¹⁵⁷ After years of being treated like “piñatas,”¹⁵⁸ companies have learned that it is easier to comply with government requests than challenge them. This is especially true when government access can be achieved without notifying the customer.

This was the state of affairs in 2007, and one would hope that the situation has improved over the last six years. This might be true, but without meaningful change in ECPA or Supreme Court holdings,¹⁵⁹ or evidence of a decrease in government access requests, the burden of proof should be on the scholar arguing that the situation has improved, rather than the scholar arguing that the status quo has remained unchanged. Although the government’s relationship with businesses can hardly be characterized as healthy, there are multiple ways to begin rebuilding a healthy environment without the large-scale changes often suggested in CSLI reform demands.

1. *Costs for D Orders*

One way companies might seek to rebalance the power in their relationship with the government is by continuing to charge the government for access to their information. ECPA gives service providers the ability to demand compensation for the costs incurred by responding to government requests, including D Orders.¹⁶⁰ According to statute, this amount must be mutually agreed upon by the government entity and the service provider or decided by a court.¹⁶¹ Companies take different approaches to reimbursement. For example, Facebook has stated that it might not demand compensation for government requests if they assist in protecting its own interests and customers.¹⁶² Multiple companies have a simple list of costs for each type of information requested.¹⁶³ There is no uniform system for deciding these costs.

157. *See id.*

158. *Id.* at 535.

159. Some Supreme Court cases have affected the government’s current actions. For example, *United States v. Jones* limited the government’s use of GPS tracking. *See United States v. Jones*, 132 S. Ct. 945 (2012). However, this holding only increased the government’s reliance on the third-party doctrine and CSLI. *See Kravets, supra* note 34. So even pro-privacy developments do not appear to actually help the current relationships between the government and business.

160. 18 U.S.C. § 2706 (2012).

161. § 2706(b).

162. *Information for Law Enforcement Authorities*, FACEBOOK, <https://www.facebook.com/safety/groups/law/guidelines> (last visited Feb. 24, 2014).

163. Andy Greenberg, *These Are The Prices AT&T, Verizon and Sprint Charge For Cellphone Wiretaps*, FORBES (Apr. 3, 2012, 3:01 PM), <http://www.forbes.com/sites/andygreenberg/2012/04/03/these-are-the-prices-att-verizon-and-sprint-charge-for-cellphone-wiretaps>; *see*

The flaw with this system is that government agents might not actually be charged for the information that they receive. This might occur because companies make the choice not to pursue reimbursement.¹⁶⁴ It also might occur because technological advances could reduce or eliminate the cost to the companies of complying (e.g., automatic responses). Some might argue that it would not be good to inhibit a government investigation by requiring payment, even when a company is willing to absorb the costs or the costs are negligible. However, privacy advocates have called for a requirement that government agents must pay fees for collecting information.¹⁶⁵

There are a few strong reasons for requiring the government to pay fees for its collection of customer information. First, it would provide more transparency to the government's actions. By charging the government agents for its services, companies create a paper trail that helps keep track of the amount and types of government actions. Currently this information is not typically available to the public, but if these payment requirements were paired with more freedom for companies to disclose government requests, it would help the public see how much information the government collects. Second, it would ensure that the government has at least some purpose for requesting the information. If such requests for information were free, there would be no incentive to submit narrow requests or not to collect the information at all. Requiring at least some charge for this information would require government agents to think twice before collecting it.¹⁶⁶

2. *Anti-pinging Requirements*

Another small reform that could help bring more balance to this relationship would be for magistrate judges to officially address the government's use of "pinging." Pinging occurs when government agents call a cell phone and then hang up before the cell actually starts to ring.¹⁶⁷ Doing this creates a log in the cell phone service provider's record, and these logs

also Yahoo! Compliance Guide for Law Enforcement 12, http://pacinlaw.us/pdf/sup/Yahoo_Compliance_Guide.php (last visited Feb. 24, 2014).

164. See *supra* note 162.

165. See, e.g., Anne Flaherty, *What the Government Pays to Snoop on You*, USA TODAY (Jul. 10, 2013, 8:30 AM), <http://www.usatoday.com/story/money/business/2013/07/10/what-government-pays-to-snoop-on-you/2504819> (noting Christopher Soghoian's belief that it is better to charge money to create a paper trail).

166. The idea of a company providing information for free is especially problematic, given that a company is going out of its way to encourage government requests for information. This is especially ironic as it is the customer's money that pays for the disclosure.

167. See Freiwald, *supra* note 10, at 704.

become historic CSLI within milliseconds after the company receives it.¹⁶⁸ Technically, government agents could regularly ping a suspect as many times as they want before demanding the historic CSLI from a service provider, and thus they can map a suspect's movements as thoroughly as they want. Magistrate judges often push back against "pinging" when it comes to D Orders.¹⁶⁹ They are perfectly equipped to prevent this type of overreach by the government; they could refuse a request if agents engaged in pinging, or they could require government agents to affirm that they did not ping the device for which they now are requesting historic CSLI.

B. BUSINESSES AND INDIVIDUALS

Unlike the relationship between the government and businesses, which is between two powerful and informed parties, customers typically do not have knowledge of how companies use their information or the power to influence a company's decision. Also, unless the information at issue relates to a specific subset of information, like credit reports or health information, there are not many statutes that govern how a company collects and maintains information from an individual. To achieve more balance in this relationship, change will have to come through contractual agreements and increased consumer awareness.

1. *Contractual Agreements*

Without specific government regulation or customer influence, companies have been able to create contracts that give them free and extensive use of information. To create a change, customers can push for contractual agreements that provide more protection for their information. Without a legislative regulation, one could argue that this is a fruitless discussion, as customers do not have the bargaining power to demand any contractual changes. However, a recent study of consumer opinion by the Berkeley Center for Law and Technology shows that seventy-four percent of consumers believe that cell phone service providers should either not keep their information at all or keep it less than a year.¹⁷⁰ This shows an existing demand for privacy from consumers, a demand that is not likely to decrease given the national attention privacy issues, especially government surveillance, have received. Companies might want to ignore calls for greater

168. See Gidari, *supra* note 154, at 543.

169. See Freiwald, *supra* note 10, at 704 n.141.

170. Jennifer Urban, Chris Jay Hoofnagle & Su Li, *Mobile Phones and Privacy* 19 (UC Berkeley Pub. Law Research Paper Series, Paper No. 2103405, 2012), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2103405.

privacy protections, but it would be foolish to completely ignore consumer opinion.¹⁷¹ For this reason, at the very least, a discussion of contractual protections for information is worthwhile.

There are many ways that a contractual provision could better protect customer information. One of the easiest ways to protect the information is to include a data minimization requirement in a contract. Currently, telephone service providers do not have limitations on how long they can retain customer information. According to the ACLU's research in 2011, telephone service providers vary in how long they retain customer information, though most keep historic CSLI between one to two years.¹⁷² This is much longer than what many customers might expect or want.¹⁷³ Such a minimization requirement might be the easiest way to avoid abuse of historic CSLI.

2. *Consumer Awareness*

Another important way to help restore the relationship between businesses and customers is to create more consumer awareness. Consumers especially should know how their information will be collected, used, and retained by a company. Most of this type of information is in that company's privacy policy. These privacy policies are often long and complicated, and they do not always contain all the information a customer would want to know. For example, Verizon's Privacy Policy is over 5,500 words long.¹⁷⁴ What is more, it does not say how long it retains information such as historic CSLI, though it does promise to keep sensitive personal information, which is not defined, "only as long as reasonably necessary."¹⁷⁵ A consumer might not know how long is "reasonably necessary" for a company. This is not to single out Verizon for criticism. Nevertheless, when a service provider's

171. This is especially true as privacy is becoming a growing concern for consumers. See s.e. Jones, *Why 2014 May Be the Year Consumers Demand Their Privacy Back*, YAHOO! VOICES (Feb. 7, 2014), <http://voices.yahoo.com/why-2014-may-year-consumers-demand-their-privacy-12518023.html>. In fact, some major companies are using privacy as a selling point. See Katy Bachman, *New Microsoft Privacy Campaign Promotes Consumer Control: Campaign Will Stir Debate over Do Not Track*, ADWEEK (Apr. 22, 2013, 6:00 AM), <http://www.adweek.com/news/advertising-branding/new-microsoft-privacy-campaign-promotes-consumer-control-148781>.

172. See *Cell Phone Location Tracking Request Response – Cell Phone Company Data Retention Chart*, ACLU, <https://www.aclu.org/cell-phone-location-tracking-request-response-cell-phone-company-data-retention-chart> (last visited Feb. 24, 2014).

173. See Urban et al., *supra* note 170, at 19.

174. *Privacy Policy*, VERIZON, <http://www.verizon.com/about/privacy/policy/#wireinfo> (last visited Feb. 24, 2014).

175. *Id.*

privacy policy does not mention information like CSLI or give clear timelines for retaining information, customers will be unable to understand how their information is used and act accordingly.

C. GOVERNMENT AND INDIVIDUALS

Many of the individuals' problems with businesses resurface in their relationship with the government. Without transparency, most customers have no reason to know how the government is collecting, using, and retaining their information. To create meaningful change, citizens must have the ability to influence the government's laws, but they cannot do so if they remain unaware of the government's actions. By encouraging the government to increase transparency, individuals will be able to participate more effectively in the political process and bring more balance and accountability to the relationship.¹⁷⁶

1. *Notification for Collection of Information*

As written, ECPA does little to encourage transparency on behalf of the government. Although it requires that customers be notified in case of a wiretap,¹⁷⁷ it does not have such a requirement for when companies turn over business records, including CSLI, to the government. When this lack of any notification requirement is paired with an unclear privacy policy, customers have little knowledge of how their information will be used in theory or in practice. By providing a notification requirement for other types of information, customers will be able to see just how often, or not often, their information has been accessed or used. This knowledge will let them make an informed decision on what they would enable the government to do.

Another way to encourage notification, on a broader level, would be to require the government to file reports on how it collects and uses service provider records on the whole. This would not provide the immediate and personal feedback of an individual notification requirement, but it would give privacy advocates and individuals more awareness of current government practices. Congress required these types of reports for wiretaps and pen register trap and trace interception, hoping that it would provide accountability for government activities.¹⁷⁸ The distinction between pen register or wiretap information and other third-party business information makes sense in its historical context. However, these distinctions start to

176. This discussion of government and individual interaction has played an important role in the ECPA reform forum. See Pell & Soghoian, *supra* note 10; Kerr, *supra* note 132.

177. 18 U.S.C. § 2703(b) (2012).

178. See Pell & Soghoian, *supra* note 10; S. REP. NO. 90-1097, at 69 (1968).

break down in today's smartphone culture. Business records, like historic CSLI, are now much more useful,¹⁷⁹ and much more invasive, than they used to be.

2. *Data Minimization*

Increasing transparency is not the only way to foster more individual protections. It could also occur with data minimization requirements. The idea of data minimization is not new to ECPA. In the Wiretap Act, law enforcement agents must seek to “minimize the interception of communications not otherwise subject to interception.”¹⁸⁰ Currently there is no such minimization requirement for minimizing information collected for other types of information. A minimization requirement could take multiple forms. First, it could require that government agents refrain from collecting information that is irrelevant to an ongoing investigation. It could also require government agencies to discard some of the general information that it collected once it completes an investigation or closes a case.

This second minimization requirement could help to alleviate the concerns that are arising under the mosaic theory. Under the mosaic theory, the government is able to assemble a complete picture of a person's activities through many individual pieces of surveillance.¹⁸¹ This type of all-compassing surveillance has caused some judicial concern.¹⁸² Although some scholars, notably Orin Kerr, have argued that attacking government surveillance on the basis of the mosaic theory is unconvincing,¹⁸³ it could, at least, lend some support to a data minimization requirement. Such a requirement would not need to say that the mosaic theory should limit government surveillance in all respects; it would simply ask that government agents discard information that was not necessary to their investigation.

D. STATE LEGISLATURES ENFORCING MORE INDIVIDUAL PRIVACY RIGHTS

Some state legislatures have already started reforming privacy law and adding more protections than the ECPA requires.¹⁸⁴ These solutions, although not perfect, as they would provide an uneven patchwork of protection for individuals and regulation for companies, can play an

179. See Kravets, *supra* note 34.

180. 18 U.S.C. § 2518(5) (2012).

181. See Kerr, *supra* note 132, at 313.

182. See generally *United States v. Maynard*, 615 F.3d 544 (D.C. Cir. 2010).

183. See Kerr, *supra* note 132.

184. See *supra* Section III.D.

important role in shaping the public discussion and pressuring broader reform. State legislatures have the ability to implement many of the solutions outlined in this Part into their jurisdictions.

V. CONCLUSION

Historic CSLI is a perfect example of how dramatic changes in technology have increased the amount and sensitivity of information that businesses collect from their customers. *In re Cell Site* shows how, under the current constitutional and regulatory framework, courts are willing to expand the third-party doctrine to include this new and sensitive information. The Fifth Circuit's holding allows for an opportunity to reevaluate the flaws in the third-party doctrine and ECPA and to reassess the harms, not just to individuals, but to the relationships between government agents, businesses, and individuals. Any potential solution to this problem should seek to rebuild these relationships, not merely to address the flaws in the regulatory framework, thus providing a healthier environment for future technological developments.

NSA METADATA COLLECTION AND THE FOURTH AMENDMENT

Joseph D. Mornin[†]

On June 5, 2013, the *Guardian* published a classified order from the U.S. Foreign Intelligence Surveillance Court (“FISC”), which it obtained from former government contractor Edward Snowden.¹ The order compelled Verizon to deliver millions of records of its customers’ telephone calls to the National Security Agency (“NSA”).²

Further disclosures continue to reveal the scope of the NSA surveillance program and its legal justifications. In response, the federal government has declassified several additional documents, many of them heavily redacted.³ Together, the materials show that since September 11, 2001, the NSA has collected and analyzed vast amounts of U.S. internet and telephone communications.

Many of the documents published thus far relate to the NSA’s collection of phone call records,⁴ known as “telephony metadata.”⁵ Metadata includes

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1. Glenn Greenwald, *NSA Collecting Phone Records of Millions of Verizon Customers Daily*, THE GUARDIAN (June 5, 2013), <http://www.theguardian.com/world/2013/jun/06/nsa-phone-records-verizon-court-order>; see also Peter Maass, *How Laura Poitras Helped Snowden Spill His Secrets*, N.Y. TIMES (Aug. 13, 2013), <http://www.nytimes.com/2013/08/18/magazine/laura-poitras-snowden.html>.

2. Greenwald, *supra* note 1.

3. See, e.g., Jane Chong, *The Latest NSA Documents III: The Government Responds*, LAWFARE BLOG (Sept. 11, 2013), <http://www.lawfareblog.com/2013/09/the-latest-nsa-documents-iii-the-government-responds>.

4. Further disclosures continue to reveal new facets of the NSA’s surveillance activities. For instance, at the time of this writing, the *Washington Post* reported that the NSA collects nearly five billion records per day about the locations of cellphones around the world (although not in the United States). See Barton Gellman and Ashkan Soltani, *NSA Tracking Cellphone Locations Worldwide, Snowden Documents Show*, WASH. POST (Dec. 4, 2013), http://www.washingtonpost.com/world/national-security/nsa-tracking-cellphone-locations-worldwide-snowden-documents-show/2013/12/04/5492873a-5cf2-11e3-bc56-c6ca94801fac_story.html. So far, the Obama administration has publicly offered a legal rationale only for the telephony metadata collection program.

5. Secondary Order at 2, In re Application of the Federal Bureau of Investigation for an Order Requiring the Production of Tangible Things from Verizon Business Network Services, Inc. on behalf of MCI Communication Services, Inc., No. BR 13-80 (FISC Apr. 25,

information about a phone call—who, where, when, and how long—but not the content of the conversation.⁶ The FISC order to Verizon, for instance, compelled disclosure of “all call detail records or ‘telephony metadata’ created by Verizon for communications (i) between the United States and abroad; or (ii) wholly within the United States, including local telephone calls.”⁷ Government officials have acknowledged that the FISC has issued similar orders to the other major U.S. telephone carriers, suggesting that the NSA gathers metadata from virtually every American phone call.⁸

The legal justification for the government’s bulk metadata collection rests on Section 215 of the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001 (“USA PATRIOT Act”).⁹ In addition, the government has argued that the surveillance program is consistent with the First and Fourth Amendments.¹⁰ The FISC, which operates in secret, has approved well over ninety-nine percent of the government’s requests.¹¹

2013) [hereinafter *Verizon Order*], available at <http://www.theguardian.com/world/interactive/2013/jun/06/verizon-telephone-data-court-order>.

6. *Id.* The FISC order indicates that the call records do not include the names of customers, but NSA Director Keith Alexander has written that the agency can easily correlate phone numbers with caller identities. See Kurt Opsahl, *Gems Mined from the NSA Documents and FISA Court Opinions Released Today*, EFF DEEPLINKS BLOG (Sept. 10, 2013), <https://www.eff.org/deeplinks/2013/09/gems-mined-nsa-docs-released-today>.

7. *Verizon Order*, *supra* note 5, at 2.

8. Siobhan Gorman et al., *U.S. Collects Vast Data Trove*, WALL ST. J. (June 7, 2013), <http://online.wsj.com/article/SB10001424127887324299104578529112289298922.html> (“[E]very time the majority of Americans makes a call, NSA gets a record of the location, the number called, the time of the call and the length of the conversation.”).

9. The Uniting and Strengthening American by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001, Pub. L. No. 107-56, 115 Stat. 272. See Administration White Paper: Bulk Collection of Telephony Metadata Under Section 215 of the USA PATRIOT Act 2 (Aug. 9, 2013), available at <http://big.assets.huffingtonpost.com/Section215.pdf> [hereinafter *Administration White Paper*].

10. *Id.*

11. See *Foreign Intelligence Surveillance Act Court Orders 1979–2012*, EPIC, https://epic.org/privacy/wiretap/stats/fisa_stats.html (last updated May 4, 2012) (noting that the FISC has rejected eleven out of approximately thirty-five thousand requests since 1978). *But see* Letter from Judge Reggie B. Walton, FISC, to Senator Patrick J. Leahy, Chairman, Senate Comm. on the Judiciary (July 29, 2013), available at <http://www.uscourts.gov/uscourts/courts/fisc/honorable-patrick-leahy.pdf> (contesting the view of the court as a “rubber stamp,” noting that in some cases the FISC has required the government to amend its requests before the FISC will issue an order).

The Snowden disclosures have sparked public controversy and provoked constitutional challenges in federal courts.¹² This Note aims to contribute to that debate in two ways. First, it collects information scattered across numerous government documents—some of which Edward Snowden has disclosed, others of which the government has declassified—to tell the story of the NSA’s telephony metadata collection program since September 11, 2001. Second, it assesses the government’s argument that call record data lacks protection under the Fourth Amendment. In particular, this Note asks whether the NSA’s prolonged collection of telephony metadata is consistent with Fourth Amendment doctrine in light of the U.S. Supreme Court’s 2012 decision in *United States v. Jones*, in which the Court raised serious doubts about the constitutionality of unfettered metadata collection and analysis.¹³

Part I reviews the development of the NSA surveillance program and its legal basis since September 11, 2001.

Part II explores the government’s Fourth Amendment arguments. The government relies on the third-party doctrine, first developed in *United States v. Miller*, which held that there are no Fourth Amendment protections for information voluntarily disclosed to third parties.¹⁴ In particular, the government relies on *Smith v. Maryland*, which held that callers lack a Fourth Amendment interest in the numbers they dial because they voluntarily turn over that data to their telephone providers.¹⁵ Since callers have no right to privacy in their metadata, the government argues, the NSA can gather, store, and analyze any amount of telephony metadata over any period of time.¹⁶

Part III addresses the details of the telephony metadata gathered under the NSA program. Research in computer science shows how metadata analysis can reveal a wide range of sensitive information. In the age of “big data,” the line between “metadata” and “content” tends to blur, raising doubts about *Smith*’s holding that metadata categorically lacks any Fourth Amendment protection.

12. See *Obama administration drowning in lawsuits filed over NSA surveillance*, RT.COM (July 16, 2013), <http://rt.com/usa/snowden-leaks-surveillance-suits-174>.

13. *United States v. Jones*, 132 S. Ct. 945 (2012).

14. *United States v. Miller*, 425 U.S. 435 (1976).

15. *Smith v. Maryland*, 442 U.S. 735 (1979); see also Administration White Paper, *supra* note 9, at 19–20.

16. Administration White Paper, *supra* note 9, at 20 (“Although the telephony metadata obtained through Section 215 includes, in addition to the numbers dialed, the length and time of the calls and other similar dialing, routing, addressing, or signaling information, under the reasoning adopted by the Supreme Court in *Smith*, there is no reasonable expectation of privacy in such information, which is routinely collected by telecommunications service providers for billing and fraud detection purposes.”).

Part IV assesses the government's Fourth Amendment argument in light of *United States v. Jones*.¹⁷ This Note argues that the government's reasoning is consistent with the Supreme Court's precedent in *Smith*, since the Court has yet to revise its position on Fourth Amendment protections for third-party records. Yet, the NSA's large-scale metadata collection raises a familiar Fourth Amendment dilemma: as new technology makes it easier for the government to detect and apprehend criminals, it also sharpens threats to personal privacy and disrupts the balance of power between citizens and government. *Jones* signals the possibility that the Court is willing to revisit the third-party doctrine under new technological circumstances. The *Jones* Court based its holding on the fact that officers trespassed onto the suspect's property, avoiding the question of whether a privacy invasion had occurred. But five concurring Justices argued that data collection in the aggregate implicates Fourth Amendment concerns, even if the individual data points lack protection. Under the theory of these five Justices, the NSA's surveillance program tests the limits of current Fourth Amendment doctrine.

I. NSA SURVEILLANCE AFTER 9/11

This Part reviews the history and scope of the NSA's metadata collection activities since the terrorist attacks of September 11, 2001 ("9/11"). The NSA program initially operated under a series of presidential authorizations, known collectively as the President's Surveillance Program ("PSP").¹⁸ After several White House officials questioned the PSP's legal foundations, the authority for the NSA's activities shifted to secret orders from the FISC.¹⁹ The FISC orders have compelled American telephone companies to turn over extensive call records to the NSA for storage and analysis.

A. THE PRESIDENT'S SURVEILLANCE PROGRAM

In the days following the 9/11 attacks, NSA Director General Michael Hayden implemented an emergency surveillance program to monitor communications involving phone numbers associated with foreign terrorists.²⁰ Shortly afterward, the White House began advocating for a permanent expansion of the NSA's authority to conduct domestic surveillance. General Hayden prepared a report for Vice President Cheney's

17. *Jones*, 132 S. Ct. 945.

18. See ST-09-0002 Working Draft, Office of the Inspector General 20 (Mar. 24, 2009), available at <https://www.aclu.org/files/natsec/nsa/20130816/NSA%20IG%20Report.pdf> [hereinafter IG Report #1].

19. See *id.* at 37.

20. See *id.* at 3.

office on existing gaps in the NSA's operations.²¹ He emphasized that "access to metadata of communications with one end in the United States would significantly enhance NSA's analytic capabilities."²²

On October 4, 2001, Vice President Cheney's legal counsel, David Addington, drafted a presidential authorization granting the expanded authority General Hayden had requested.²³ The initiative, known as the President's Surveillance Program, allowed surveillance of international terrorism targets for thirty days.²⁴ It authorized the NSA to collect²⁵ four types of information—telephony content, telephony metadata, internet content, and Internet metadata—if (1) there was probable cause that one party was in Afghanistan or involved with international terrorism, (2) at least one party was outside the United States, or (3) neither party was a U.S. citizen.²⁶ The project relied on fifty dedicated servers to store and process data.²⁷ Its initial budget was \$25 million.²⁸

The presidential authorizations underlying the PSP expanded the NSA's authority to include surveillance of domestic communications. Prior to the PSP, the NSA lacked the authority to collect metadata from communications in which one end—the recipient address of the email or the phone number

21. *See id.* at 4.

22. *See id.*

23. *Id.* at 1–2, 8.

24. *See id.* at 7.

25. There is controversy around the definition of "collection" in the surveillance context. According to Director of National Intelligence James Clapper, the NSA's efforts to gather call record data is not "collection." *See DNI James Clapper Interview with Andrea Mitchell, NBC News Chief Foreign Affairs Correspondent, IC ON THE RECORD* (June 8, 2013), <http://icontherecord.tumblr.com/post/57729424567/dni-james-clapper-interview-with-andrea-mitchell>. Similarly, Department of Defense regulations indicate that information "shall be considered as 'collected' only when it has been received for use by an employee of a DoD intelligence component in the course of his official duties." *See* DEPARTMENT OF DEFENSE, PROCEDURES GOVERNING THE ACTIVITIES OF DOD INTELLIGENCE COMPONENTS THAT AFFECT UNITED STATES PERSONS (Dec. 1982), available at http://www.fas.org/irp/doddir/dod/d5240_1_r.pdf. Privacy advocates have accused the Obama administration of using the term evasively. *See, e.g.,* Philip Bump, *The Most Recent Updates to Your NSA Surveillance Dictionary*, ATLANTIC WIRE (Aug. 8, 2013), <http://www.theatlanticwire.com/politics/2013/08/most-recent-updates-your-nsa-surveillance-dictionary/68140>. However, the Department of Justice treats "production" of records by phone companies as synonymous with government "collection." *See* Administration White Paper, *supra* note 9, at 2 (referring to the NSA's telephony metadata activities as "collection"). This Note follows the DOJ's convention in describing the NSA's acquisition of phone records as "collection" or "gathering."

26. *See* IG Report #1, *supra* note 18, at 8–9.

27. *See id.* at 10.

28. *See id.*

being called—was in the United States.²⁹ The PSP granted this authority, greatly expanding the NSA's ability to conduct surveillance within U.S. borders.³⁰

President George W. Bush reissued PSP authorizations approximately every forty-five days.³¹ The drafting process was highly secretive and tightly controlled. David Addington personally drafted the memos and brought them by hand to the NSA, where General Hayden stored them in a locked safe in his office.³² For every forty-five-day period, the Central Intelligence Agency (“CIA”) and National Counterterrorism Center would submit “Threat Assessment Memoranda” detailing known terrorist threats and recent intelligence-gathering activity.³³ The Department of Justice’s (“DOJ”) Office of Legal Counsel (“OLC”) would review the memos to determine whether the threat of attack was sufficient to continue the warrantless surveillance.³⁴ Each reauthorization of the PSP found that “an extraordinary emergency continued to exist”³⁵

The White House tasked the DOJ with reviewing the legality of the PSP. OLC Deputy Assistant Attorney General John Yoo was the sole DOJ official with knowledge of the PSP's existence.³⁶ Yoo issued his first memo in support of the program on November 2, 2001.³⁷ He argued that the Foreign Intelligence Surveillance Act of 1978 (“FISA”), which restricts the government's power to gain intelligence on foreign powers within U.S. borders, does not apply to surveillance for purposes of national security.³⁸ In addition, he argued (1) that the Fourth Amendment does not apply to non-U.S. persons outside the United States, (2) that communications crossing U.S. borders can be lawfully intercepted under the “border crossing exception,” (3) that there are no constitutional protections against searches

29. *See id.* at 13.

30. *See id.*

31. *See* OFFICES OF THE INSPECTORS GENERAL OF THE DEPARTMENT OF DEFENSE, DEPARTMENT OF JUSTICE, CENTRAL INTELLIGENCE AGENCY, NATIONAL SECURITY AGENCY, AND THE OFFICE OF THE DIRECTOR OF NATIONAL INTELLIGENCE, UNCLASSIFIED REPORT ON THE PRESIDENT'S SURVEILLANCE PROGRAM 6 (July 19, 2009), available at <https://www.fas.org/irp/eprint/psp.pdf> [hereinafter IG Report #2].

32. *See* IG Report #1, *supra* note 18, at 22.

33. *See* IG Report #2, *supra* note 31, at 7–9.

34. *See id.*

35. *See id.* at 6.

36. *See id.* at 10.

37. *See id.* at 11.

38. *See id.* at 11–12.

and seizures in “direct support of military operations,” and (4) that the PSP’s activity did not require warrants because it was “reasonable.”³⁹

NSA officials sent two requests for access to Yoo’s opinion.⁴⁰ The White House denied both requests.⁴¹ Meanwhile, President Bush continued to periodically reauthorize the PSP.⁴² Then, in 2003, Yoo and his supervisor left the DOJ. Their replacements, Jack Goldsmith and Patrick Philbin, both learned of the PSP’s existence.⁴³ Goldsmith and Philbin seriously questioned Yoo’s legal analysis. They told Addington and then-White House Counsel Alberto Gonzales that they did not think the PSP could continue in its current form.⁴⁴ In January 2004, Deputy Attorney General James Comey learned of the program as well and agreed that Yoo’s analysis was problematic.⁴⁵

On March 4, 2004, Attorney General John Ashcroft determined that he, too, had serious doubts about the PSP’s legal justifications.⁴⁶ Upon Ashcroft’s sudden hospitalization for gallstone pancreatitis, Gonzales immediately asked Goldsmith to draft a letter supporting Yoo’s analysis.⁴⁷ Goldsmith, Comey, and Philbin quickly responded that the Yoo memo “did not provide a basis for finding that [the surveillance activities] were legal”⁴⁸ Facing an impasse with the DOJ, Gonzales visited Ashcroft at the hospital to seek his approval for the reauthorization.⁴⁹ Ashcroft refused.⁵⁰

On March 11, 2004, Gonzales himself signed the PSP authorization without DOJ approval.⁵¹ On March 16, the OLC submitted another memo reviewing the legality of the PSP.⁵² It found legal support for collection of internet content, telephony content, and telephony metadata, but “it determined that, given the method of collection, bulk Internet metadata was

39. *See id.* at 10–13.

40. *See* IG Report #1, *supra* note 18, at 21.

41. *See id.*

42. *See* IG Report #2, *supra* note 31, at 13.

43. *See id.* at 19–20.

44. *See id.* at 20.

45. *See id.* at 21.

46. *See id.*

47. *See id.* at 21–22.

48. *See id.*

49. *See id.* at 24–25.

50. *See id.*

51. *See id.* at 26.

52. *See* IG Report #1, *supra* note 18, at 42.

prohibited by the terms of FISA and Title III [of the Omnibus Crime Control and Safe Streets Act].”⁵³

Gonzales replied to Comey that the President’s interpretation of the law was definitive, regardless of the DOJ’s objections.⁵⁴ Several high-level officials at the DOJ and the Federal Bureau of Investigation (“FBI”) planned to resign in protest, including Comey, Goldsmith, and FBI Director Robert Mueller, all of whom drafted letters of resignation. Comey said “he believed it was impossible for him to remain with DOJ if the President would do something DOJ said was not legally supportable.”⁵⁵ Goldsmith “cited the ‘shoddiness’ of the prior OLC legal review, the ‘over-secrecy’ of the PSP, and the ‘shameful’ incident at the hospital as among his grievances.”⁵⁶ According to his staff, Ashcroft himself considered resigning as well.⁵⁷

Nonetheless, for reasons that remain unclear, President Bush rescinded the NSA’s authority to collect internet metadata on March 19, 2004.⁵⁸ The DOJ began seeking alternative legal justifications for the NSA’s surveillance activities. The OLC initially found authority for the program in the “all necessary and appropriate force” language in the Authorization for Use of Military Force—the bill passed in the days following 9/11.⁵⁹ Soon, however, it shifted its focus to FISA.⁶⁰

B. FOREIGN INTELLIGENCE SURVEILLANCE COURT ORDERS

FISA established standards for electronic surveillance aimed at collecting “foreign intelligence” inside the United States.⁶¹ Initially, FISA authorized “electronic surveillance of a foreign power or an agent of a foreign power for

53. *See id.* at 37. “Title III” refers to Title III of the Omnibus Crime Control and Safe Streets Act, 18 U.S.C. §§ 2510–20 (2012), commonly known as the Wiretap Act. According to the Supreme Court, the Wiretap Act “authorizes the use of electronic surveillance for classes of crimes carefully specified in 18 U.S.C. § 2516. Such surveillance is subject to prior court order. Section 2518 sets forth the detailed and particularized application necessary to obtain such an order as well as carefully circumscribed conditions for its use.” *United States v. U.S. Dist. Court for E. Dist. of Mich., S. Div.*, 407 U.S. 297, 301–02 (1972).

54. *See IG Report #2, supra* note 31, at 29.

55. *See id.* at 27.

56. *See id.*

57. *See id.*

58. *See IG Report #1, supra* note 18, at 38.

59. *See IG Report #2, supra* note 31, at 29.

60. *See id.*

61. Foreign Intelligence Surveillance Act of 1978, Pub L. No. 95-511, 92 Stat. 1783, 1784–98 (codified at 50 U.S.C. §§ 1801–11(2012)).

the purpose of obtaining foreign intelligence information . . .”⁶² The USA PATRIOT Act of 2001⁶³ amended FISA by relaxing the threshold for domestic surveillance, requiring foreign intelligence gathering to be for “a significant purpose” (rather than “the purpose”).⁶⁴

The FISC reviews government requests for FISA orders.⁶⁵ The Chief Justice of the Supreme Court selects eleven district court judges to sit on the FISC for a maximum of seven years. Government agencies argue before the court in secret *ex parte* proceedings, over which a single FISC judge presides. A three-judge panel, comprised of judges from the district and circuit courts, can hear appeals from FISC decisions.⁶⁶ The Supreme Court has jurisdiction to review the appellate court’s decisions. Since the establishment of the FISC in 1978, it has denied only eleven out of approximately 35,000 government requests.⁶⁷

As government officials grew increasingly wary of the legal basis for the President’s Surveillance Program, the DOJ began transitioning the legal basis for the NSA’s surveillance activities from presidential authorizations to FISC orders.⁶⁸ By January 2007, the authority for the NSA’s data collection and analysis activities under the PSP had been fully replicated under FISA.⁶⁹ The final presidential authorization for PSP expired on February 1, 2007.⁷⁰

C. METADATA COLLECTION AND ANALYSIS

The NSA collects the following types of telephony metadata:

[C]omprehensive communications routing information, including but not limited to session identifying information (e.g., originating and terminating telephone number, International Mobile station

62. Foreign Intelligence Surveillance Act § 102(b), 92 Stat. at 1787–88, *available at* <http://www.gpo.gov/fdsys/pkg/STATUTE-92/pdf/STATUTE-92-Pg1783.pdf> (emphasis added).

63. The Uniting and Strengthening American by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001, Pub. L. No. 107-56, 115 Stat. 272.

64. 50 U.S.C. § 1804(a)(6)(B).

65. *See* 50 U.S.C. § 1803.

66. *See* § 1803(b). FISC appeals are rare. *See, e.g., In re Sealed Case*, 310 F.3d 717 (Foreign Int. Surv. Ct. Rev. 2002).

67. *See Foreign Intelligence Surveillance Act Court Orders 1979–2012, supra* note 11. However, Chief Judge Reggie Walton has noted that the FISC often asks the government to amend its requests before it grants approval. *See* Carol D. Leonnig, *Secret court says it is no rubber stamp; work led to changes in U.S. spying requests*, WASH. POST (Oct 15, 2013), http://www.washingtonpost.com/politics/secret-court-says-it-is-no-rubber-stamp-led-to-changes-in-us-spying-requests/2013/10/15/d52936b0-35a5-11e3-80c6-7e6dd8d22d8f_story.html.

68. *See* IG Report #1, *supra* note 18, at 37.

69. *See id.* at 38–39.

70. *See* IG Report #2, *supra* note 31, at 30.

Equipment Identity (IMEI) number, International Mobile Subscriber Identity (IMSI) number, etc.), trunk identifier, telephone calling card numbers, and time and duration of call. Telephony metadata does not include the substantive content of any communication, as defined by 18 U.S.C. § 2510(8), or the name, address, or financial information of a subscriber or customer.⁷¹

The FISC has indicated that its telephony metadata orders do not authorize the collection of cell site location information.⁷² Director of National Intelligence James Clapper wrote to the Senate Intelligence Committee that “[u]nder this program NSA is not currently receiving cell site location data, and has no current plans to do so.”⁷³ In response, Senators Ron Wyden and Mark Udall wrote that “while the NSA claims no current plans to turn Americans’ cell phones into tracking devices, it clearly claims the authority to do so.”⁷⁴

The NSA uses a range of data mining techniques to draw insights from its vast collections of metadata. A key part of the NSA’s post-9/11 operations was the Metadata Analysis Center (“MAC”).⁷⁵ Twenty NSA analysts, reporters, and technologists staffed a “24-hour 7-day a week watch center” to analyze the bulk metadata collected under the new surveillance program.⁷⁶ A separate unit called the Counterterrorism Product Line was responsible for analyzing content.⁷⁷ The two programs “worked closely together to coordinate efforts and share information.”⁷⁸ By 2004, the

71. Amended Memorandum Opinion at 2 n.2, *In re Application of the Federal Bureau of Investigation for an Order Requiring the Production of Tangible Things from [Redacted]*, No. BR 13-109 (FISA Ct. Aug. 29, 2013) [hereinafter August 2013 FISC Opinion], available at <http://www.uscourts.gov/uscourts/courts/fisc/br13-09-primary-order.pdf>.

72. *Id.*

73. See Mark Stanley, *When Wyden and Udall Talk NSA, Pay Close Attention*, CENTER FOR DEMOCRACY & TECH. BLOG (July 30, 2013), <https://www.cdt.org/blogs/mark-stanley/3007when-wyden-and-udall-talk-nsa-pay-close-attention>.

74. See *id.* Since this conversation between Clapper and the two Senators, the *Washington Post* has reported that the NSA collects nearly five billion cell phone location records each day. See Barton Gellman & Ashkan Soltani, *NSA tracking cellphone locations worldwide, Snowden documents show*, WASH. POST (Dec. 4, 2013), http://www.washingtonpost.com/world/national-security/nsa-tracking-cellphone-locations-worldwide-snowden-documents-show/2013/12/04/5492873a-5cf2-11e3-bc56-c6ca94801fac_story.html.

However, according to the NSA, “there is no element of the intelligence community that under any authority is intentionally collecting bulk cellphone location information about cellphones in the United States.” *Id.*

75. See IG Report #2, *supra* note 31, at 11–12.

76. See *id.* at 13.

77. See *id.*

78. See *id.*

metadata and content operations had merged into a single organization called the Advanced Analysis Division (“AAD”), subdivided into three teams: internet metadata, telephony metadata, and content (for both internet and telephony communications).⁷⁹

The NSA’s techniques for analyzing metadata include “contact chaining” and “three-hop network analysis” using a custom platform called MAINWAY.⁸⁰ Call chaining involves recording and analyzing the calling patterns of a suspect.⁸¹ Each call the suspect makes counts as a “hop.” Each call those recipients make is another hop. NSA Deputy Director Chris Inglis has testified that the NSA conducts three-hop network analysis—that is, it analyzes data up to three degrees of separation from initial terrorist suspects.⁸² If a person has forty contacts, three-hop network analysis could encompass data relating to 2.5 million people.⁸³ When the NSA detects a lead on terrorist activity, it passes the tip to the FBI or the CIA for further investigation.⁸⁴

II. THE GOVERNMENT’S FOURTH AMENDMENT ARGUMENT

Since 2007, the government has sought and obtained several FISC orders authorizing the collection of telephony metadata. The statutory basis for the orders is Section 215 of the USA PATRIOT Act, which establishes guidelines for government “investigation[s] to obtain foreign intelligence information . . . to protect against international terrorism.”⁸⁵ In addition, the government has advanced several arguments in favor of the program’s constitutionality. This Note addresses the government’s contention that a “Section 215 order for the production of telephony metadata is not a ‘search’ as to any individual” under the Fourth Amendment.⁸⁶

79. *See id.* at 15.

80. *See id.* at 16–17.

81. *See* Philip Bump, *The NSA Admits It Analyzes More People’s Data Than Previously Revealed*, ATLANTIC WIRE (July 17, 2013), <http://www.thewire.com/politics/2013/07/nsa-admits-it-analyzes-more-peoples-data-previously-revealed/67287>.

82. *See id.*

83. *See* Will Oremus, *The One GIF That Shows Just How Wide the NSA’s Surveillance Net Really Is*, SLATE (Sept. 4, 2013), http://www.slate.com/blogs/future_tense/2013/09/04/three_hops_gif_aclu_infographic_shows_how_nsa_s_surveillance_spreads_exponentially.html.

84. *See* August 2013 FISC Opinion, *supra* note 71, at 17–18.

85. 50 U.S.C. § 1861(a)(1) (2012).

86. Administration White Paper, *supra* note 9, at 19.

A. THE THIRD-PARTY DOCTRINE

The government's Fourth Amendment argument rests on the third-party doctrine, first articulated in the Supreme Court's 1976 holding in *United States v. Miller*.⁸⁷ The *Miller* Court based its analysis on *United States v. Katz*, which held that a Fourth Amendment search occurs when the government violates the defendant's "reasonable expectation of privacy."⁸⁸ The defendant in *Katz* prevailed, but the Court noted that "[w]hat a person knowingly exposes to the public, even in his own home or office, is not a subject of Fourth Amendment protection."⁸⁹ In *Miller*, the Court extended this reasoning to hold that bank depositors do not have a reasonable expectation of privacy in financial information that they voluntarily convey to the bank. The Court based its holding on the principle that:

[T]he Fourth Amendment does not prohibit the obtaining of information revealed to a third party and conveyed by him to Government authorities, even if the information is revealed on the assumption that it will be used only for a limited purpose and the confidence placed in the third party will not be betrayed.⁹⁰

A depositor "takes the risk" that the bank will disclose her information to the government.⁹¹

The Court applied the third-party doctrine to telephone information in its 1979 decision in *Smith v. Maryland*.⁹² In that case, law enforcement agents suspected Smith of robbing a woman and making threatening phone calls to her.⁹³ The telephone company cooperated with agents to install a "pen register," a device which records the numbers the caller dials, but not the content of conversations.⁹⁴ The pen register data led to Smith's arrest and conviction. Smith argued that the government's warrantless installation of the pen register violated his Fourth Amendment rights because he had a reasonable expectation of privacy in the numbers he dialed.⁹⁵ The Court rejected Smith's argument on the ground that he voluntarily conveyed the information to the phone company, which collected it for a variety of

87. *United States v. Miller*, 425 U.S. 435 (1976).

88. *Katz v. United States*, 389 U.S. 347, 360 (1967) (Harlan, J., concurring).

89. *Id.* at 351.

90. *Miller*, 425 U.S. at 443.

91. *Id.*

92. *Smith v. Maryland*, 442 U.S. 735 (1979).

93. *Id.* at 737.

94. *Id.*

95. *Id.* at 741-42.

legitimate business purposes (such as fraud detection and billing).⁹⁶ Following *Miller*, the Court held that callers do not have a reasonable expectation of privacy in information they voluntarily disclose to phone companies.⁹⁷ As a result, “there is no legitimate expectation of privacy in the numbers dialed because the caller assumes the risk that the telephone company will disclose them to the police.”⁹⁸ Therefore, the Fourth Amendment does not require the government to seek a warrant before obtaining call metadata.

The FISC has extended the reasoning of *Smith* to authorize the government’s bulk collection of telephony metadata under Section 215. “The production of telephone service provider metadata,” the court wrote, “is squarely controlled by the U.S. Supreme Court decision in *Smith v. Maryland*.”⁹⁹ Phone companies continue to collect metadata for a variety of business purposes, and callers should be aware that this collection is taking place. As in *Smith*, callers assume the risk that companies will disclose this information to the government.¹⁰⁰ Since callers do not have a reasonable expectation of privacy in “dialing information,” the FISC held, bulk government collection is not a search under the Fourth Amendment.

B. TYPES OF DATA

Smith was the product of a pre-digital, pre-cellular telephone era. The pen register used in that case was a mechanical device that “record[ed] the numbers dialed on a telephone by monitoring the electrical impulses caused when the dial on the telephone is released.”¹⁰¹ It could only record the numbers that the caller dials. It could not record other types of data, such as whether the recipient answered the call, how long the call lasted, or how the phone company routed the call through its network.

The government has acknowledged that the types of data collected under the Section 215 orders are significantly more complex. In addition to the numbers dialed, the telephony metadata the NSA collects includes “the length and time of the calls and other similar dialing, routing, addressing, or signaling information”¹⁰² The data set also includes “session identifying

96. *Id.* at 743–44.

97. *Id.*

98. *Id.* at 747.

99. August 2013 FISC Opinion, *supra* note 71, at 6.

100. *See id.* at 7.

101. *Smith*, 442 U.S. at 736 n. 1.

102. Administration White Paper, *supra* note 9, at 20.

information,” which uniquely identifies the caller, and “trunk identifiers,” which approximate the caller’s location.¹⁰³

However, the government argues (and the FISC has agreed) that there is no constitutional difference between the numbers dialed in *Smith* and the richer telephony metadata that the NSA collects under the authority of the Section 215 orders. The FISC has held that “the same type of information” is at issue in *Smith* and the Section 215 program.¹⁰⁴ “The Court is aware,” wrote Judge Eagan, “that additional call detail data is obtained via this production than was acquired through the pen register acquisition at issue in *Smith*.”¹⁰⁵ However, the court concluded that the telephony metadata at issue “is nothing more than pen register and trap and trace data,” so callers have no Fourth Amendment expectation of privacy.¹⁰⁶ The government argues further that the type of information is irrelevant. As long as callers voluntarily convey this information to their mobile service providers, the reasoning of *Smith* holds, and Fourth Amendment protections do not apply.¹⁰⁷

C. THE SCOPE AND DURATION OF DATA COLLECTION

Both *Miller* and *Smith* involved the collection of a single person’s data. The Section 215 orders, by contrast, compel the disclosure of millions of records concerning nearly every American with mobile or landline phone service.¹⁰⁸ Neither *Miller* nor *Smith* considered whether the scope of data collection would alter the Fourth Amendment analysis. The FISC, however, has held that the number of people under surveillance is “irrelevant” to the court’s analysis.¹⁰⁹ If a single person lacks a reasonable expectation of privacy in information she discloses to third parties, “grouping together a large number of similarly-situated individuals cannot result in a Fourth Amendment interest springing into existence *ex nihilo*.”¹¹⁰

103. August 2013 FISC Opinion, *supra* note 71, at 2 n.2.

104. *Id.* at 6.

105. *Id.* at 6 n.11.

106. August 2013 FISC Opinion, *supra* note 71, at 6 n.11. A “trap and trace” device is:

[A] device or process which captures the incoming electronic or other impulses which identify the originating number or other dialing, routing, addressing, and signaling information reasonably likely to identify the source of a wire or electronic communication, provided, however, that such information shall not include the contents of any communication . . .

18 U.S.C. § 3147 (2012).

107. Administration White Paper, *supra* note 9, at 20.

108. *See* August 2013 FISC Opinion, *supra* note 71, at 8.

109. *Id.* at 9.

110. *Id.*

Miller and *Smith* also involved data collection over relatively short periods of time. Neither the government nor the FISC has addressed whether the duration of data collection is constitutionally significant, but the implication of the court's logic is straightforward: if a caller lacks a reasonable expectation of privacy in a single call record, then no Fourth Amendment interest appears *ex nihilo* to protect two records, or ten, or ten thousand.

The FISC's Fourth Amendment analysis has remained consistent. In an opinion dated October 11, 2013—the most recent public FISC opinion to date—Judge McLaughlin affirmed the court's earlier analysis: “[t]he Court has conducted an independent review of the issues presented by the application and agrees with and adopts Judge Eagan’s analysis as the basis for granting the Application.”¹¹¹

III. WHAT METADATA CAN REVEAL

Following the Snowden disclosures, President Obama sought to calm the public controversy:

[N]obody is listening to your calls. That's not what this program's about. As was indicated, what the intelligence community is doing is looking at phone numbers and durations of calls. They are not looking at people's names, and they're not looking at content. But by sifting through this so-called metadata, they may identify potential leads with respect to folks who might engage in terrorism.¹¹²

Similarly, Director of National Intelligence James Clapper wrote:

The program does not allow the Government to listen in on anyone's phone calls. The information acquired does not include the content of any communications or the identity of any subscriber. The only type of information acquired under the Court's order is telephony metadata, such as telephone numbers dialed and length of calls.¹¹³

111. *Id.* Judge McLaughlin extended the court's Fourth Amendment analysis to address the Supreme Court's holding in *United States v. Jones*. For a discussion of the FISC's treatment of *Jones*, see *infra* Part IV.

112. *Transcript: Obama's Remarks on NSA Controversy*, WALL ST. J. (June 7, 2013), <http://blogs.wsj.com/washwire/2013/06/07/transcript-what-obama-said-on-nsa-controversy>.

113. Press Release, Office of the Director of National Intelligence, DNI Statement on Recent Unauthorized Disclosures of Classified Information (June 6, 2013), *available at* <http://www.dni.gov/index.php/newsroom/press-releases/191-press-releases-2013/868-dni-statement-on-recent-unauthorized-disclosures-of-classified-information>.

The government acknowledges that some aspects of telephone communications—“people’s names” and the “content” of conversations—should receive stronger constitutional protections because they contain sensitive personal information.¹¹⁴ Metadata, on the other hand, deserves lower protection because it poses a minimal privacy threat.

Yet, metadata analysis can lead to significant insights. Indeed, the value of metadata allows the NSA to justify spending millions of dollars on its phone record surveillance program. Metadata can expose private information on three distinct levels: first, records of individual calls; second, a caller’s records collected over time; and third, an aggregation of many callers’ records.¹¹⁵

A. INDIVIDUAL RECORDS

On the individual level, “metadata is often a proxy for content.”¹¹⁶ That is, there are circumstances in which a single call record reveals as much (or more) about the call as does the content of the conversation. The clearest examples involve single-use hotlines—for instance, services that offer support for domestic violence and rape. Other examples include suicide prevention and whistleblowing, including an anonymous whistleblowing hotline for the NSA itself.¹¹⁷ Calls to those numbers will “reveal information that virtually everyone would consider extremely private.”¹¹⁸

Another type of single-use phone number relates to charities, activist organizations, and political campaigns that accept donations via text message. In those cases, call records tell detailed stories of the sender’s ideological positions and political affiliations, raising significant free speech and privacy concerns.¹¹⁹

B. RECORDS OVER TIME

Analysis of a caller’s records over time can also reveal private information. Analysis of multiple records can reveal a detailed picture of the

114. *Id.*

115. The structure of this analysis draws from the declaration of computer science professor Edward Felten in *ACLU v. Clapper*. See Declaration of Professor Edward W. Felten, American Civil Liberties Union v. Clapper, 2013 WL 6819708, No. 13 Civ. 3994 (S.D.N.Y. Dec. 27, 2013), available at <http://ia801803.us.archive.org/22/items/gov.uscourts.nysd.413072/gov.uscourts.nysd.413072.27.0.pdf> [hereinafter Felten Decl.].

116. *Id.* at 14.

117. See *Office of the Inspector General (OIG) Hotline*, NATIONAL SECURITY AGENCY, http://www.nsa.gov/about/oig/oig_hotline.shtml (last modified Sept. 1, 2010).

118. Felten Decl., *supra* note 115, at 15.

119. See *id.* at 16.

caller's social network, identifying close relationships and professional associations.¹²⁰ In some cases, it reveals more than the content of the conversations. For instance, suppose that:

A woman calls her gynecologist; then immediately calls her mother; then a man who, during the past few months, she had repeatedly spoken to on the telephone after 11pm, followed by a call to a family planning center that also offers abortions. A likely storyline emerges that would not be as evident by examining the record of a single call.¹²¹

In addition, researchers have shown that mobile phone usage patterns can predict the caller's gender, age, marital status, job, and household size, with accuracy rates up to eighty-seven percent.¹²² If an organization's call records are analyzed over time, they could also reveal the identities of confidential sources or anonymous litigants.¹²³ Consider the case of former CIA director David Petraeus: despite his attempts to conceal his identity and the identity of his paramour, Paula Broadwell, FBI agents were able to discover the identities of both using only their trail of metadata.¹²⁴

C. AGGREGATED RECORDS

Metadata is perhaps most revealing when analyzed on a large scale. Research in "big data" has shown that the impact on individual privacy increases with the size of the data set under analysis.¹²⁵ Therefore, "a universal database containing records about all Americans' communications will reveal vastly more information, including new observable facts not currently known to the research community, because no researcher has access to the kind of data set the government is presumed to have."¹²⁶

The government's arguments reveal the extent to which it believes large-scale metadata analysis can lead to significant insights. According to the government, it can collect "entire repositories of records [without a warrant], even when a particular record is unlikely to directly bear on the matter being

120. *See id.* at 17.

121. *Id.* at 18.

122. *See* Josh Jia-Ching Ying et al., *Demographic Prediction Based on User's Mobile Behaviors*, NOKIA RESEARCH CENTER (June 18–19, 2012), <https://research.nokia.com/files/public/mdc-final241-ying.pdf>.

123. *See* Felten Decl., *supra* note 115, at 19.

124. *See A Guardian Guide to Your Metadata*, THE GUARDIAN (June 12, 2013), <http://www.theguardian.com/technology/interactive/2013/jun/12/what-is-metadata-nsa-surveillance>.

125. *See* Felten Decl., *supra* note 115, at 21.

126. *Id.* at 21–22.

investigated, because searching the entire repository is the *only feasible means* to locate the critical documents.¹²⁷ In other words, there will be meaningful information that the government can only discern through sophisticated analysis of extremely large databases.

IV. METADATA COLLECTION AFTER *UNITED STATES V. JONES*

In *United States v. Jones*, the Supreme Court examined the Fourth Amendment implications of prolonged collection and analysis of publicly available information. In particular, the Court addressed the issue of whether prolonged GPS tracking on public roads constitutes a Fourth Amendment search.¹²⁸

Police had installed a GPS device on Jones's wife's car.¹²⁹ They had a warrant, but it stipulated that they had to install the tracking device within ten days. They installed it on the eleventh day and tracked Jones for twenty-eight days.¹³⁰ The district court suppressed evidence obtained from the device while the car was parked at Jones's house but allowed the remaining data on the ground that "Jones had no reasonable expectation of privacy when the vehicle was on public streets."¹³¹ The D.C. Circuit reversed, holding that the surveillance violated Jones's reasonable expectation of privacy.¹³²

Justice Scalia, writing for a 5-4 majority, began his analysis by exploring the Fourth Amendment's basis in private property and common-law trespass.¹³³ He looked to eighteenth-century precedent to establish that the government's physical occupation of private property for the purpose of obtaining information violates the Fourth Amendment.¹³⁴ The government argued that Jones did not have a reasonable expectation of privacy in his movements on public roads.¹³⁵ But Scalia did not address the government's contention, holding that Jones's expectations were irrelevant because the government had physically intruded.¹³⁶ He surveyed cases after *Katz* to show that the Fourth Amendment's protections against physical intrusion apply,

127. *Id.* at 10.

128. *United States v. Jones*, 132 S. Ct. 945 (2012).

129. *Id.* 945–46.

130. *Id.*

131. *Id.* (quoting *United States v. Knotts*, 460 U.S. 276, 281 (1983)).

132. *United States v. Maynard*, 615 F.3d 544, 555, 564 (D.C. Cir. 2010).

133. *Jones*, 132 S. Ct. at 948.

134. *Id.*

135. *Id.* at 950.

136. *Id.*

even if the government did not violate the individual's expectation of privacy.¹³⁷ Here, the Court held that a Fourth Amendment search occurred because the government physically intruded, but it did not reach the question of whether prolonged collection and analysis of personal information would violate reasonable expectations of privacy.¹³⁸

Justice Alito, concurring in the judgment with Justices Ginsburg, Breyer, and Kagan, argued that recent Fourth Amendment case law discarded the trespass test in favor of the *Katz* test.¹³⁹ In addition, Justice Alito argued that the trespass test fails to protect against privacy invasions where no physical intrusion has occurred.¹⁴⁰ Justice Scalia responded that he would not apply the property test as the exclusive measure of Fourth Amendment violations, but rather as a minimum level of protection.¹⁴¹

Justice Alito also argued that extensive data collection and analysis implicates Fourth Amendment concerns. For instance, the trespass test “disregards what is really important”—prolonged GPS tracking—and instead focuses on a “trivial” trespass.¹⁴² Additionally, the trespass test produces incongruous results—for instance, it would prohibit short-term tracking via a physically planted GPS device, but it would allow limitless aerial surveillance.¹⁴³

Since modern technology is changing rapidly, Justice Alito advocated legislative intervention and judicial restraint. In the absence of statutory guidelines, however, he argued that “the use of longer term GPS monitoring in investigations of most offenses impinges on expectations of privacy.”¹⁴⁴

Justice Sotomayor, concurring separately, joined the holding on narrow trespass grounds, but she recognized that the trespass test “may provide little guidance” in many modern cases.¹⁴⁵ Ubiquitous surveillance, for instance, may “chill[] associational and expressive freedoms,” raising Fourth Amendment concerns.¹⁴⁶ Personal data, when aggregated and analyzed, can “reveal private aspects of identity.”¹⁴⁷ She suggested that the Fourth

137. *Id.* at 950–51.

138. *Id.*

139. *Id.* at 957–58 (Alito, J., concurring).

140. *Id.*

141. *Id.* at 953 (majority opinion).

142. *Id.* at 961 (Alito, J., concurring).

143. *Id.*

144. *Id.* at 964.

145. *Id.* at 955 (Sotomayor, J., concurring).

146. *Id.* at 956.

147. *Id.*

Amendment should offer stronger protections for information disclosed to third parties. This “business records” doctrine of *Smith*, she argued,

[I]s ill suited to the digital age, in which people reveal a great deal of information about themselves to third parties in the course of carrying out mundane tasks. People disclose the phone numbers that they dial or text to their cellular providers; the URLs that they visit and the e-mail addresses with which they correspond to their Internet service providers; and the books, groceries, and medications they purchase to online retailers.¹⁴⁸

Together, five Justices took the view that metadata collection and analysis can raise Fourth Amendment concerns, despite having been voluntarily disclosed to a third party. “Although ultimately resolved on narrow grounds,” write Professors Danielle Keats Citron and David Gray, “five Justices joined concurring opinions in *Jones* expressing sympathy for some version of the ‘mosaic theory’ of Fourth Amendment privacy. This theory holds that we maintain reasonable expectations of privacy in certain quantities of information even if we do not have such expectations in the constituent parts.”¹⁴⁹

In its defense of the NSA surveillance program, the government has given two reasons in light of *Jones* why it believes mass metadata collection is not a Fourth Amendment search. First, NSA collection of telephony metadata does not involve trespass, whereas the holding in *Jones* turned on the officers’ physical intrusion.¹⁵⁰ Second, call records do not include location information (except trunk data, which reveals approximate location), whereas *Jones* addressed precise GPS location data specifically.¹⁵¹

The government’s reading of Fourth Amendment doctrine is consistent with the Court’s development of the third-party doctrine in *Smith*. However, as Professor Yochai Benkler has noted, “there is no question that all three *Jones* opinions offer a very strong argument that the dramatically lower cost of pervasive, sustained surveillance of publicly observable data in bulk implicates the Fourth Amendment”¹⁵² Justice Scalia, invoking Justice Rehnquist’s warning in *United States v. Knotts*, wrote that “different

148. *Id.* at 957.

149. David Gray & Danielle Keats Citron, *A Shattered Looking Glass: The Pitfalls and Potential of the Mosaic Theory of Fourth Amendment Privacy*, 14 N.C. J. L. & TECH. 381, 381–82 (2013).

150. Administration White Paper, *supra* note 9, at 20.

151. *Id.*

152. Yochai Benkler, *In Secret, Fisa Court Contradicted US Supreme Court on Constitutional Rights*, THE GUARDIAN (Sept. 22, 2013), <http://www.theguardian.com/commentisfree/2013/sep/22/secret-fisa-court-constitutional-rights>.

constitutional principles may be applicable” to “dragnet-type law enforcement practices,” suggesting that publicly available data may acquire Fourth Amendment protections after prolonged collection.¹⁵³ Justice Alito argued that “what is really important” is not technical trespass, but rather the level of private information that long-term data collection and analysis can reveal.¹⁵⁴ Justice Sotomayor cautioned against the dangers of applying narrow Fourth Amendment doctrine in a new technological environment: “Awareness that the Government may be watching chills associational and expressive freedoms. And the Government’s unrestrained power to assemble data that reveal private aspects of identity is susceptible to abuse.”¹⁵⁵

The FISC has endorsed the government’s reading of *Jones*. Judge McLaughlin wrote for the court that the five concurring Justices in *Jones* recognized that “precise, pervasive monitoring by the government of a person’s location could trigger Fourth Amendment protection”¹⁵⁶ However, NSA telephony metadata collection “concerns the acquisition of non-content metadata other than location information.”¹⁵⁷

The government’s position, however, is an overly narrow reading of the concerns of the five Justices. Their concern about “precise, pervasive monitoring” of GPS location data was an illustration of a broader principle. Individual data points alone may reveal little sensitive information, which is why the third-party doctrine does not assume they are protected by a reasonable expectation of privacy. When aggregated and analyzed, however, they can become highly revealing. In the context of location data, a single visit to an HIV clinic may not be revealing. But it becomes revealing, in a way that the five *Jones* Justices recognized, when combined with a visit shortly after to family members’ houses, a trip to the pharmacy, and sudden time off from work. Similarly, a single phone call from an HIV clinic is not revealing. But it becomes so when combined with a call to an insurance company, a doctor, and family members.

The NSA metadata collection program falls within the area of concern that the five Justices in *Jones* identified. As explained above, metadata collection—particularly on a large scale and over long periods of time—can

153. *Jones*, 132 S. Ct. at 951–52 n.6 (citing *United States v. Knotts*, 460 U.S. 276, 284 (1983)).

154. *Id.* at 961 (Alito, J., concurring).

155. *Id.* at 956 (Sotomayor, J., concurring).

156. Memorandum at 5, *In re Application of the Federal Bureau of Investigation for an Order Requiring the Production of Tangible Things from [Redacted]*, No. BR 13-158 (FISA Ct. Oct. 11, 2013), available at <http://www.uscourts.gov/uscourts/courts/fisc/br13-158-memo-131018.pdf>.

157. *Id.*

be equally or more revealing than the content of conversations. The Justices stopped short of calling into question the rationale underlying the third-party doctrine, although Justice Sotomayor argued strongly that the doctrine should receive especially close judicial scrutiny given, the types of data and tools for analysis now available to law enforcement.

Rather, the Justices recognized that the Fourth Amendment implications of data-driven surveillance might be qualitatively and quantitatively different than the circumstances in which the third-party doctrine developed. *Smith* involved the surveillance of a carefully targeted suspect for a few days at most. NSA metadata collection, on the other hand, involves the collection of virtually every American phone call over multiple years, bearing a strong resemblance to Justice Scalia's fear of "dragnet-type law enforcement practices."¹⁵⁸ In addition, the police officers in *Smith* sought to identify a specific person making harassing calls to a specific number. But the NSA program gathers as much data as possible in the hope that certain key data points will emerge. Certainly, government agents can use sophisticated data mining techniques to capture insights that may assist the legitimate needs of law enforcement. But queries may also expose a great deal of private information about innocent people. The principle underlying the *Jones* concurrences is that the Fourth Amendment may offer protection against the privacy harms resulting from government queries of massive databases, even if the individual data points themselves lack protection.

158. *Jones*, 132 S. Ct. at 951–52 n.6.

**STANDING IN THE WAY OF PRIVACY
PROTECTIONS: THE ARGUMENT FOR A RELAXED
ARTICLE III STANDING REQUIREMENT
FOR CONSTITUTIONAL AND STATUTORY
CAUSES OF ACTION**

Lexi Rubow[†]

*“That the individual shall have full protection in person and in property is a principle as old as the common law; but it has been found necessary from time to time to define anew the exact nature and extent of such protection.”*¹

– Samuel Warren & Louis Brandeis

The evolution of technology over the past few decades has had a profound impact on society. This change has been beneficial in countless ways, from the convenience of new communication technologies to the efficiency gains associated with electronic storage of employee and medical records. There are, however, personal and societal costs to new information technology. As more of individuals’ lives take place online, where personal information can be digitally captured and stored, individuals “are placed in the uncomfortable position of not knowing who might have access to [their] personal and business e-mails, [their] medical and financial records, or [their] cordless and cellular telephone conversations.”² Perhaps more troublingly, even where the law has evolved to protect individuals’ privacy, current standing jurisprudence may place them in the “uncomfortable position of not knowing”³ whether they will have access to the courts to enforce these rights. Consider the following scenarios:

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1. Samuel D. Warren & Louis D. Brandeis, *The Right to Privacy*, 4 HARV. L. REV. 193 (1890).

2. *Bartnicki v. Vopper*, 532 U.S. 514, 541 (2001) (Rehnquist, C.J., dissenting).

3. *Id.*

Example A: In December 2009, a hacker infiltrated the database of a payroll-processing firm.⁴ To compound the problem, the payroll-processing firm had retained its customers' employees' "personal and financial information for years after" their employment ended.⁵ As a result, the hacker gained access to the "names, addresses, Social Security numbers, dates of birth, and bank account information" of 27,000 employees.⁶

Example B: Google told Safari Internet browser users that it would not track their Internet usage, as long as users retained Safari's default "do not track" browser setting.⁷ In violation of this promise, Google circumvented Safari's cookie blocker and placed cookies on Safari users' computers, then used the cookies to track users' Internet activities for several months.⁸ Google removed the cookies only after a Stanford researcher caught them in the act.⁹

Example C: In 2008, Congress amended the Foreign Intelligence Surveillance Act (FISA) to authorize surveillance of U.S. citizens' communications with non-U.S. persons outside of the United States.¹⁰ A number of individuals, including attorneys and human rights workers, who engaged in sensitive international communications had to take expensive measures to protect their legitimate conversations with clients from government surveillance.¹¹ For example, many had to travel to the home countries of their international clients in order to converse in confidence.

Aside from invoking similar privacy concerns, these stories share one key trait: the plaintiffs in each case failed to persuade their respective court to even address their substantive claims. Instead, before even *considering the merits* of the plaintiffs' claims, each court held that the plaintiffs had not suffered an injury-in-fact, and therefore lacked standing to sue.¹²

4. Reilly v. Ceridian Corp., 664 F.3d 38, 40 (3d Cir. 2011), *cert. denied*, 132 S. Ct. 2395 (2012).

5. Reilly v. Ceridien Corp., No. 10-5142, 2011 WL 735512, at *1 (D.N.J. Feb. 22, 2011).

6. *Reilly*, 664 F.3d at 40.

7. *See In re Google, Inc. Cookie Placement Consumer Privacy Litigation*, MDL Civ. No. 12-2358, 2013 WL 5582866, at *2–4 (D. Del. Oct. 9, 2013).

8. *Id.*

9. Kelly Fiveash, *FTC Urged to Probe Google's Safari-Tracking Gaffe*, THE REGISTER (Feb. 20, 2012), http://www.theregister.co.uk/2012/02/20/google_bypasses_apple_safari_privacy/.

10. *See Clapper v. Amnesty Int'l*, 133 S. Ct. 1138, 1144 (2013) (describing FISA as permitting surveillance of people reasonably believed to be located outside of the United States, which could include communications surveillance targets have with U.S. nationals).

11. *Id.* at 1145–46.

12. Reilly v. Ceridien Corp., No. 10-5142, 2011 WL 735512, at *7 (D.N.J. Feb. 22, 2011); *In re Google*, at 7; *Clapper*, 133 S. Ct. at 1154–55.

Privacy law plaintiffs have encountered great difficulty in establishing standing because the abstract and context-specific nature of privacy harm does not fit well with current, rigid judicial conceptualizations of injury-in-fact. In attempting to define injury-in-fact in the privacy setting, some courts attempt to analogize to older doctrine from other areas of law,¹³ while others premise their findings of injury-in-fact on the probability that a particular event will occur.¹⁴ These avenues of legal reasoning mask the fact that when judges determine whether a privacy plaintiff has suffered an “injury-in-fact,” they are actually choosing one of many potential conceptualizations of privacy harm. This results in a decision-making process that is opaque at best and, at worst, denies court access to some plaintiffs that society may view as worthy of protection.

The Ninth Circuit recently introduced an alternative injury-in-fact standard, finding standing upon the plaintiffs’ showing of a statutory violation.¹⁵ This Note contrasts the Ninth Circuit’s approach with the Supreme Court’s recent government surveillance decision in *Clapper v. Amnesty International*, which followed the more conventional practice of divorcing the substantive cause of action analysis from the procedural injury-in-fact analysis.¹⁶ Although different issues are at play in statutory versus constitutional causes of action, this Note explains that the Ninth Circuit’s approach best fits the policies underlying standing doctrine for both types of claims.

Part I explores the problem of applying the injury-in-fact requirement to privacy issues and describes two alternative formulations of privacy harm. Parts II and III summarize the current state of standing jurisprudence in the constitutional and private-sector statutory context, respectively, and demonstrate that in each instance courts choose among a variety of conceptualizations of privacy. Part IV analyzes the Supreme Court’s recent *Clapper* decision and the Ninth Circuit’s approach in light of the various goals underlying standing doctrine. Finally, Part V concludes that, especially in the privacy context, the Ninth Circuit’s approach offers the preferable method for analyzing injury-in-fact.

13. See, e.g., *Pisciotta v. Old Nat’l Bancorp*, 499 F.3d 629, 638–39 (7th Cir. 2007) (analogizing data breaches to tort liability for exposure to harmful substances).

14. See, e.g., *Clapper*, 133 S. Ct. at 1150 (dismissing plaintiffs’ concerns as a “speculative chain of possibilities” insufficient to grant standing).

15. *Edwards v. First Am. Corp.*, 610 F.3d 514, 517 (9th Cir. 2010).

16. See *Clapper*, 133 S. Ct. at 1147.

I. INJURY-IN-FACT VS. PRIVACY HARM

This Part begins by explaining the injury-in-fact requirement and the difficulty of applying such a requirement to privacy harms. It then describes two example conceptualizations of privacy harm. It concludes by introducing an alternative method of analyzing injury-in-fact that better comports with the varied and contextual nature of privacy harms.

A. THE DISCONNECT BETWEEN ARTICLE III STANDING AND PRIVACY HARMS

Standing is “a question of access apart from the merits of the controversy,”¹⁷ addressing “whether a specific person is the proper party to bring a matter to the court.”¹⁸ Standing requirements derive from the “case or controversy” clause in Article III of the Constitution.¹⁹ Although the clause does not explicitly mention standing, in the late twentieth century, the Supreme Court began using this clause to limit the types of plaintiffs and cases that it would entertain.²⁰ Over the next few decades, the Court elaborated on the elements required to establish a “case or controversy” under Article III. Current precedent requires plaintiffs to establish that they suffered an injury that is (1) “concrete, particularized,” and “actual or

17. Steven L. Winter, *The Metaphor of Standing and the Problem of Self-Governance*, 40 STAN. L. REV. 1371, 1255 (1988).

18. ERWIN CHEMERINSKY, FEDERAL JURISDICTION 56 (4th ed. 2003).

19. The “case or controversy” clause of Article III reads as follows:

The judicial Power shall extend to all Cases, in Law and Equity, arising under this Constitution, the Laws of the United States, and Treaties made, or which shall be made, under their Authority;--to all Cases affecting Ambassadors, other public ministers and Consuls;--to all Cases of admiralty and maritime Jurisdiction;--to Controversies to which the United States shall be a Party;--to Controversies between two or more States;--between a State and Citizens of another State;--between Citizens of different States;--between Citizens of the same State claiming Lands under Grants of different States, and between a State, or the Citizens thereof, and foreign States, Citizens or Subjects.

U.S. CONST. art. III, § 2, cl. 1. Notably, the clause does not mention most of the modern “Article III standing” requirements, including injury-in-fact. *See id.*

20. Scholars have described the development of the doctrine as a response to the rapid expansion of federal dominance corresponding with the rise of the modern administrative state. *See* Winter, *supra* note 17, at 1455. Standing was a tool used to exercise “expansive federal judicial power in the economic sphere to invalidate progressive legislation.” *Id.* The development of standing doctrine also corresponded with the rise of liberalism, which “focuses upon a regime that achieves agreement on process rather than end goals.” *Id.* at 1454.

imminent”); (2) “fairly . . . trace[able] to the challenged action”; and (3) “redress[able] by a favorable decision.”²¹

The first prong, known as the injury-in-fact requirement, does not pose much of a burden for harms that the law has traditionally recognized. Physical injuries were one of the first types of harm that the law sought to prevent,²² and, as such, few would dispute that the victim of a battery, for example, has suffered a legally cognizable harm.²³ Similarly, causes of action for economic harms, such as trespass to chattels or breach of contract, have existed since the English common law.²⁴ When confronting these traditional types of harm, courts rarely even address the issue of standing. Instead, the question of whether a plaintiff has met the injury-in-fact requirement typically arises in cases where the plaintiff asserts a harm for a newly evolving legal protection.²⁵

Loss of privacy is one such harm. Samuel Warren and Louis Brandeis first contemplated legal protection for privacy at the end of the nineteenth century in their influential article *The Right to Privacy*.²⁶ Writing in response to new developments in photographic technology that allowed users to instantaneously take pictures, Warren and Brandeis noted that “modern enterprise and invention have, through invasions upon his privacy, subjected [the modern individual] to mental pain and distress, far greater than could be inflicted by mere bodily injury.”²⁷ Thus, they concluded, the law should evolve to protect individuals’ “right to be let alone.”²⁸

21. *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560–61 (1992). Courts also subject cases to a second round of discretionary or “prudential” standing requirements. CHEMERINSKY, *supra* note 18 at 60. These requirements are outside the scope of this Note.

22. *See* Warren & Brandeis, *supra* note 1, at 193 (“[I]n very early times, the law gave a remedy only for physical interference with life and property.”).

23. In fact, “harm” is incorporated in the definition of battery. The Restatement (Second) of Torts, lists “a *harmful* contact with the person of the other” as one of the elements of battery. RESTATEMENT (SECOND) OF TORTS § 13 (1965) (emphasis added). This would be a tautology were it not so well-established that physical injury is, in fact, a “harm.”

24. *See generally* W.T. BARBOUR, THE HISTORY OF CONTRACT IN EARLY ENGLISH EQUITY (1914), available at <http://socserv2.socsci.mcmaster.ca/econ/ugcm/3ll3/barbour/HistoryContract.pdf>.

25. *See, e.g.*, *Lujan v. Defenders of Wildlife*, 504 U.S. 555 (1992) (environmental groups asserting interest in environmental protection of federal land); *Sierra Club v. Morton*, 405 U.S. 727 (1972) (conservationist group asserting “a special interest in the conservation and the sound maintenance of the national parks”); *United States v. Students Challenging Regulatory Agency Procedures (SCRAP)*, 412 U.S. 669 (1973) (environmental groups challenging increase in federal freight rates).

26. *See* Warren & Brandeis, *supra* note 1.

27. *Id.* at 196.

28. *Id.* at 193.

Since that time, various government entities have noted the privacy implications of evolving technologies and have created a number of causes of action to protect consumers from invasions of their privacy.²⁹ However, courts have struggled to apply the injury-in-fact requirement to cases arising under these new causes of action. At least some of this difficulty stems from the wide variety of conceptualizations of privacy harm, some or all of which may be appropriate in any given context.

B. ALTERNATIVE FORMULATIONS OF PRIVACY HARM: CONTROL AND INTELLECTUAL PRIVACY THEORIES

This section attempts to demonstrate the varied and context-specific nature of privacy harm by exploring two sample conceptualizations of privacy harm: “control theory”³⁰ and “intellectual privacy theory.”³¹

Control theorists conceptualize privacy as “the claim of individuals, groups, or institutions to determine for themselves when, how, and to what extent information about them is communicated to others.”³² It “is not simply an absence of information about what is in the minds of others; rather it is the control we have over information about ourselves.”³³ Loss of this control results in “a suffocating powerlessness and vulnerability.”³⁴ The psychological toll of such helplessness is exemplified by Franz Kafka’s *The Trial*, where the protagonist unsuccessfully attempts to navigate a cryptic and impenetrable legal bureaucracy.³⁵ The bureaucratic aggregation of individuals’ personal information, and associated “indifference, errors, abuses, frustration and lack of transparency and accountability,” inflicts harm by excluding “the protagonist from having any knowledge or participation in the process.”³⁶

Intellectual privacy theory constitutes an alternative formulation of privacy. This theory describes privacy as necessary for the “conscious

29. See, e.g., Health Insurance Privacy and Portability Act (“HIPAA”), Pub. L. No. 104-191, 110 Stat. 1936 (2002) (regulating health information); Video Privacy Protection Act (“VPPA”), 18 U.S.C. § 2710 (2012) (protecting privacy of video rental records); Cal. Civ. Code §§ 1798.29, 1798.82, 1798.84 (protecting general security of personally identifying information); Internet Security and Privacy Act, N.Y. State Tech. Law § 208 (same).

30. See, e.g., ALAN F. WESTIN, *PRIVACY AND FREEDOM* (1967).

31. See, e.g., Julie E. Cohen, *Examined Lives: Informational Privacy and the Subject as Object*, 52 STAN. L. REV. 1373 (2000).

32. WESTIN, *supra* note 30, at 7.

33. Charles Fried, *Privacy*, 77 YALE L.J. 475, 482 (1968).

34. Daniel J. Solove, “I’ve Got Nothing to Hide” and Other Misunderstandings of Privacy, 44 SAN DIEGO L. REV. 745, 766 (2007).

35. FRANZ KAFKA, *THE TRIAL* (1925).

36. Solove, *supra* note 34, at 766.

construction of self” and development of autonomous thought.³⁷ Some intellectual privacy scholars analogize sustained loss of privacy to Jeremy Bentham’s “panopticon”—a circular prison building with cells facing the center, such that a guard standing in the center can view any cell at any time.³⁸ The panopticon’s prisoners, aware that the guard may be watching, begin to censor or discipline themselves.³⁹ Similarly, individuals experiencing sustained or repeated loss of privacy begin to constrain themselves in order to preempt societal rebuke.⁴⁰ Professor Julie Cohen writes:

The point is not that people will not learn under conditions of no-privacy, but that they will learn differently, and that the experience of being watched will constrain, *ex ante*, the acceptable spectrum of belief and behavior. Pervasive monitoring of every first move or false start will at the margin, incline choices toward the bland and the mainstream. The condition of no-privacy threatens not only to chill the expression of eccentric individuality, but also, gradually, to dampen the force of our aspirations to it⁴¹

Preventing individuals from developing channels of independent thought inhibits “society’s foundational commitments to intellectual diversity and eccentric individuality.”⁴²

The types of harm implicated by any given privacy law issue will likely vary by context. As Professor Daniel Solove argues, trying to fit any given privacy problem “into a one-size-fits-all conception of privacy neglects to see the problem[] in [its] full dimensions or to understand [it] completely.”⁴³ Privacy law covers a wide range of actions that impinge on personal privacy, including surveillance, interrogation, information processing, information dissemination, or unauthorized access to information.⁴⁴ Control theory, intellectual privacy theory, or other formulations of harm may be of varying relevance, depending on the type of privacy violation in question. Thus, Solove argues that “[w]e should conceptualize privacy by focusing on the specific types of disruption and the specific practices disrupted rather than looking for the common denominator that links all of them.”⁴⁵

37. Cohen, *supra* note 31, at 1424.

38. Bert-Jaap Koops, *Law, Technology, and Shifting Power Relations*, 25 BERKELEY TECH. L.J. 973, 993 (2010).

39. *Id.* at 995.

40. *See* Cohen, *supra* note 31, at 1426.

41. *Id.*

42. Neil M. Richards, *The Dangers of Surveillance*, 126 HARV. L. REV. 1934, 1948 (2013).

43. Solove, *supra* note 34, at 759.

44. Daniel J. Solove, *A Taxonomy of Privacy*, 154 U. PA. L. REV. 477, 488–91 (2006).

45. Daniel J. Solove, *Conceptualizing Privacy*, 90 CALIF. L. REV. 1087, 1130 (2002).

This contextually sensitive approach to defining privacy-related harms is at odds with standing jurisprudence, which requires judges to apply a baseline standard of harm without any reference to the underlying cause of action. As a result, many courts “simply analyze the issues without articulating a conception of what privacy means. However, conceptualizing privacy is essential for the analysis of these issues.”⁴⁶

C. JUDGE FLETCHER AND THE NINTH CIRCUIT’S APPROACH TO STANDING

In his article *The Structure of Standing*, Judge William Fletcher of the Ninth Circuit introduces a new way of analyzing standing that may be better suited to address privacy harms.⁴⁷ Judge Fletcher argues that courts should “abandon the attempt to capture the question of who should be able to enforce legal rights in a single formula.”⁴⁸ Instead, whether or not a plaintiff has sustained an injury “must be seen as part of the question of the nature and scope of the substantive legal right on which plaintiff relies.”⁴⁹ Ultimately, Judge Fletcher concludes that causes of action carry with them implicit definitions of harm, and courts should not attempt to override this definition of harm with their own.⁵⁰ Access to the courts should be coextensive with possessing a meritorious claim pursuant to the underlying cause of action.⁵¹

Judge Fletcher’s approach is particularly attractive in the relatively nascent and abstract field of privacy law. As discussed above, the type of harm underlying a privacy cause of action may not fit well with traditional ideas of injury-in-fact. Judge Fletcher’s approach allows the entity defining the scope of the underlying cause of action to determine, implicitly or explicitly, the types of harm that are worthy of protection.

In *Edwards v. First American*,⁵² a Ninth Circuit panel, including Judge Fletcher, adopted a limited form of Judge Fletcher’s standing approach, finding standing based on the defendant’s statutory violation and thereby essentially merging the injury-in-fact standing question with the underlying cause of action.⁵³ Courts in the Ninth Circuit have since applied this standing approach to a string of privacy cases, granting plaintiffs standing if they

46. Solove, *supra* note 34, at 754.

47. William A. Fletcher, *The Structure of Standing*, 98 YALE L. J. 221 (1988).

48. *Id.* at 223.

49. *Id.* at 232–33.

50. *Id.*

51. *Id.*

52. 610 F.3d 514 (9th Cir. 2010).

53. *See id.* at 517–18.

establish a *per se* violation of a privacy statute, regardless of whether they suffered economic harm.⁵⁴

The following two Parts summarize the majority approach in the government surveillance and statutory privacy law contexts, as well as the Ninth Circuit's approach to statutory standing. These Parts demonstrate that the type of injury-in-fact required by current precedent only addresses one out of many possible conceptualizations of harm. The remainder of the Note will then analyze the implications of the majority and Ninth Circuit approaches.

II. DEFINING INJURY-IN-FACT FOR CLAIMS ARISING UNDER CONSTITUTIONAL CAUSES OF ACTION

The Supreme Court's decision in *Clapper v. Amnesty International* exemplifies the judicial practice of analyzing injury-in-fact divorced from the harms implicated by the underlying cause of action. Although the Court's decision appears to be based on a purely factual assessment of probability, this Part demonstrates that the Court still chose one of many definitions of harm.

A. CLAPPER V. AMNESTY INTERNATIONAL: THE MAJORITY OPINION

In *Clapper*, plaintiffs challenged the constitutionality of the 2008 Amendments to FISA, which expanded the government's authority to conduct surveillance.⁵⁵ Among other things, under the Amendments the government need not show that international targets are agents of a foreign power, only that they are not "United States persons."⁵⁶

In response to the FISA amendments, a group of U.S. lawyers, human rights workers, and other persons whose work involved "sensitive international communications with individuals who they believe[d were] likely targets of surveillance"⁵⁷ brought a class action lawsuit against the government challenging the amendments' constitutionality pursuant to the "Fourth Amendment, the First Amendment, Article III, and separation of powers principles."⁵⁸ The plaintiffs offered two theories for demonstrating the injury-in-fact element of Article III standing: (1) the "objectively

54. *See, e.g., In re Hulu Privacy Litigation*, No. C 11-03764 LB, 2012 WL 2119193 (N.D. Cal. June 11, 2012); *In re Facebook Privacy Litigation*, 791 F. Supp. 2d 705 (N.D. Cal. 2011).

55. *Amnesty Int'l v. Clapper*, 133 S. Ct. 1138, 1142–44 (2013).

56. *Id.*

57. *Id.* at 1142.

58. *Id.* at 1146.

reasonable likelihood” that they would suffer future injury due to acquisition of their communications,⁵⁹ and (2) present injury due to “costly and burdensome measures [taken] to protect the confidentiality of their international communications.”⁶⁰ The plaintiffs asserted that the FISA amendments “compromise[d] their ability to locate witnesses, cultivate sources, obtain information, and communicate confidential information to their clients,” such that they had to travel abroad to speak with clients in person rather than “engag[e] in certain telephone and e-mail conversations.”⁶¹

The Southern District of New York rejected these arguments, but the Second Circuit reversed, holding that as long as there was an “objectively reasonable likelihood” that the plaintiffs would be the targets of surveillance, plaintiffs had standing to sue.⁶² In particular, the court held that the plaintiffs’ “fears of surveillance” were “based on a reasonable interpretation of the challenged statute and a realistic understanding of the world.”⁶³ The Second Circuit further held that the plaintiffs’ precautionary measures caused harm sufficient to establish Article III standing, since they were taken in response to a fear of government action that was not “fanciful, paranoid, or otherwise unreasonable.”⁶⁴

The Supreme Court, in a 5-4 decision, rejected the Second Circuit’s “objectively reasonable likelihood” standard.⁶⁵ Instead, the Supreme Court held that in order to establish injury-in-fact based on a potential future injury, that injury must be certainly impending.⁶⁶ The Court held that the plaintiffs’ argument failed to meet this standard, as the likelihood that the government would actually target their conversations rested on “a highly attenuated chain of possibilities.”⁶⁷ First, the Government would have to decide to target the communications of the plaintiffs’ foreign contacts.⁶⁸ Second, the Foreign Intelligence Surveillance Court (FISC), the judicial body charged with approving ex parte surveillance applications, would need to “conclude that the Government’s proposed surveillance procedures satisfy [FISA’s] many

59. *Id.*

60. *Id.* at 1143.

61. *Id.* at 1145–46 (internal quotations omitted).

62. *Id.* at 1146.

63. *Amnesty Int’l v. Clapper*, 638 F.3d 118, 139 (2d Cir. 2011).

64. *Id.* at 134.

65. *Clapper*, 133 S. Ct. at 1154.

66. *Id.* at 1147–48.

67. *Id.* at 1148.

68. *Id.*

safeguards and are consistent with the Fourth Amendment.”⁶⁹ Third, the Government would need to succeed in intercepting the specific communications in which the plaintiffs participated.⁷⁰

The plaintiffs’ present injury arguments did not fare much better. The Court held that to establish standing based on precautionary measures taken in response to fear of government action, the plaintiffs still must demonstrate that the feared government action is certainly impending.⁷¹ The Court explained that plaintiffs “cannot manufacture standing” by undertaking protective measures.⁷² Even if this fear had the effect of chilling the plaintiffs’ protected speech, the Court held that “[a]llegations of a subjective ‘chill’ are not an adequate substitute for a claim of specific present objective harm or a threat of specific future harm.”⁷³

B. ALTERNATIVE DEFINITIONS OF HARM

All discussions of probability aside, the Court’s equating “harm” with actual interception of the plaintiffs’ conversations was, itself, a choice from among many potential definitions of harm. Although the Court did not explain its choice of definitions, control theory may, in part, justify the Court’s decision, as actual interception would indicate that the plaintiffs actually lost control of their data.

However, control theory goes beyond this understanding of harm. In fact, Solove argues that from a control theory perspective, “[t]he NSA programs are problematic even if no information people want to hide is uncovered.”⁷⁴ Comparing the NSA surveillance program to Kafka’s *The Trial*, Solove argues that NSA surveillance problematically evokes “a suffocating

69. *Id.*

70. *Id.* The Court further found that the plaintiffs’ arguments failed to establish that any alleged harm would be “fairly traceable” to the FISA amendments, since even if the plaintiffs were targeted, the Government could invoke its authority under a variety of surveillance methods. *Id.* at 1149.

71. *Id.* at 1151.

72. *Id.*

73. *Id.* at 1152. Quoting its 1972 case *Laird v. Tatum*, the Court explained that:

While acknowledging that prior cases had held that constitutional violations may arise from the chilling effect of ‘regulations that fall short of a direct prohibition against the exercise of First Amendment rights,’ the Court declared that none of those cases involved a ‘chilling effect aris[ing] merely from the individuals’ knowledge that a governmental agency was engaged in certain activities.

Id. at 1152 (quoting *Laird v. Tatum*, 408 U.S. 1, 13–14 (1972)).

74. Solove, *supra* note 34, at 766.

powerlessness and vulnerability.”⁷⁵ The secrecy of NSA programs prevents people “from having knowledge about how their information is being used, [and bars them] from being able to access and correct errors in that data.”⁷⁶ Regardless of whether the government actually intercepted the plaintiffs’ communications, the question of whether the government attempts such an interception lies completely out of the plaintiffs’ control—it is the government’s choice alone. Thus, even though the Supreme Court found that the plaintiffs failed to meet the Court’s “certainly impending” standard,⁷⁷ the plaintiffs may still have suffered harm stemming from the loss of control of their own personal information.

Similarly, under the intellectual privacy theory of harm, it would not matter whether the government actually intercepted plaintiffs’ conversations. As in Bentham’s panopticon, the government need not actually watch any given U.S. citizen; the belief that the government could be watching at any time potentially causes U.S. citizens—like the plaintiffs—to preemptively censor themselves out of fear of such invasive surveillance.⁷⁸

Both the pure control theory and the intellectual privacy theory do present justiciability problems. Because the harms described under both theories stem from the individual’s subjective perception of privacy loss, applying either theory in its purest form would mean granting access to individuals, even if their perceptions are irrational or paranoid. The Second Circuit’s “objectively reasonable likelihood” standard adeptly achieved the goal of protecting intellectual privacy harms on the societal level, while weeding out irrational or paranoid claims.⁷⁹ Knowledge of widespread surveillance under FISA certainly supports a reasonable fear that U.S. citizens will be targets of surveillance when communicating with clients in volatile areas of the world.⁸⁰ Further, the Clapper plaintiffs offered concrete evidence of self-censorship, explaining that they refrained from saying certain things to clients over the phone and travelled abroad in order to speak more freely.⁸¹

This analysis demonstrates that the Court’s holding was not purely a factual determination of probability. Instead, the Court’s equating “harm” to actual interception of the plaintiff’s conversation reflected a choice. Whether or not the Court selected the “correct” definition of harm for this context,

75. *Id.*

76. *Id.* at 766–67.

77. *See Clapper*, 133 S. Ct. at 1154.

78. *See Koops*, *supra* note 38, at 993.

79. *See Amnesty Int’l v. Clapper*, 638 F.3d 118, 135–36 (2d Cir. 2011).

80. *Amnesty Int’l*, 638 F.3d at 134.

81. *Clapper*, 133 S. Ct. at 1164 (Breyer, J., dissenting). *Cf.* Solove, *supra* note 34, at 766 (“[I]t is often very hard to demonstrate concrete evidence of deterred behavior.”).

the fact that it offered no explanation as to why it selected this definition of harm over any of the many rivaling definitions—and particularly the fact that it did so with little consideration of the harms that the Fourth or First Amendments might represent—is troubling.

III. DEFINING INJURY-IN-FACT FOR CLAIMS ARISING UNDER STATUTORY CAUSES OF ACTION

The same difficulties of defining injury-in-fact also bedevil privacy claims arising under statutory causes of action. The majority of jurisdictions also require plaintiffs alleging *statutory* privacy violations to meet a judicially determined standard of injury-in-fact separate from the underlying cause of action. Despite the fact that a number of these statutes provide a private right of action,⁸² plaintiffs struggle to allege facts sufficient to meet the required separate, judicially-defined conception of injury-in-fact.

A. THE MAJORITY RULE: JUDICIALLY ASSIGNED HARM DEFINITION

Courts assessing standing for private-sector privacy cases have used a number of standards of injury-in-fact. Some courts attempt to analogize privacy causes of action to other, more established areas of tort law.⁸³ Others take a similar approach to the *Clapper* Court, equating the occurrence of a particular event to “harm,” then premising standing on the likelihood of that event occurring in the future.⁸⁴ Although a full canvas of standing jurisprudence in each area of sectoral privacy law lies beyond the scope of this Note, the following examples demonstrate that courts following the majority practice of defining injury make an active choice by selecting one definition of harm from many.

In *Pisciotta v. Old National Bancorp*, the Seventh Circuit analogized the harm stemming from a data breach⁸⁵ to the “increased risk” theory of harm

82. See, e.g., Wiretap Act, 18 U.S.C. §§ 2511(5), 2520 (2012); Stored Communications Act, 18 U.S.C. § 2712 (2012); Fair and Accurate Credit Transactions Act, 15 U.S.C. §§ 1681 et seq. (2012).

83. See *Pisciotta v. Old Nat'l Bancorp*, 499 F.3d 629, 634 (7th Cir. 2007) (analogizing data breaches to toxic tort liability).

84. See *Reilly v. Ceridian Corp.*, 664 F.3d 38, 42 (3d Cir. 2011) (rejecting plaintiffs' claims because they failed to show a “certainly impending” injury or one with a “high degree of immediacy”).

85. “A data breach is an incident in which sensitive, protected or confidential data has potentially been viewed, stolen or used by an individual unauthorized to do so.” *Definition: Data Breach*, TECHTARGET (May 2010), <http://searchsecurity.techtarg.com/definition/data-breach>.

that some courts utilize in the toxic tort context.⁸⁶ In *Pisciotta*, a hacker improperly accessed the computer system of a financial services provider, exposing the plaintiffs' personal information but resulting in no realized financial loss or identity theft.⁸⁷ In analyzing whether there had been an injury-in-fact, the court analogized the case at hand to environmental exposure tort cases, which granted plaintiffs standing upon demonstration that the act "increase[d] the risk of future harm that the plaintiff would have otherwise faced, absent the defendant's actions."⁸⁸ The court granted standing on this basis.

On a similar set of facts, the Third Circuit in *Reilly v. Ceridian Corp.* used a "likelihood of future harm" approach to determine whether there had been an injury-in-fact.⁸⁹ In *Reilly*, a hacker accessed the database of a payroll and human resources management company, exposing clients' employees' "names, addresses, social security numbers, dates of birth, and bank account information."⁹⁰ The *Reilly* court's analysis mirrored the analysis in *Clapper* and arrived at the same result: although plaintiffs had "incurred costs to monitor their credit activity,"⁹¹ the likelihood that their information would be abused was too attenuated for plaintiffs to establish standing to sue.⁹² The court reasoned that plaintiffs would need to demonstrate that a malicious third party "(1) read, copied, and understood their personal information; (2) intends to commit future criminal acts by misusing the information; and (3) is able to use such information to the detriment of Appellants by making unauthorized transactions in Appellants' names."⁹³ The court held that "[u]nless and until these conjectures come true, Appellants have not suffered any injury; there has been no misuse of the information, and thus, no harm."⁹⁴

Although the *Pisciotta* and *Reilly* courts analyzed harm in different ways, the two cases represent the majority trend of requiring plaintiffs to meet a

86. See Miles L. Galbraith, Note, *Identity Crisis: Seeking a Unified Approach to Plaintiff Standing for Data Security Breaches of Sensitive Personal Information*, 62 AM. U. L. REV. 1365, 1388–96 (2013).

87. *Pisciotta*, 499 F.3d at 631–32.

88. *Id.* at 634.

89. *Reilly*, 664 F.3d at 42.

90. *Id.* at 40.

91. *Id.*

92. *Id.*; see *Clapper v. Amnesty Int'l*, 133 S. Ct. 1138, 1148–49 (2013).

93. *Reilly*, 664 F.3d at 42.

94. *Id.*; see also *Katz v. Pershing, LLC*, 672 F.3d 64, 80 (1st Cir. 2012) (holding no injury-in-fact where an electronic brokerage management system used insufficient encryption methods, thereby exposing plaintiffs' information, absent any evidence that the plaintiffs' data was "accessed by one or more unauthorized parties").

judicially determined standard of injury-in-fact separate from the underlying cause of action. And, as in *Clapper*, the courts' reasoning for defining harm in a particular way is all but clear. The court in *Pisciotta* found standing without addressing the harms underlying the privacy cause of action, finding injury-in-fact by way of analogy to tort law.⁹⁵ The court in *Reilly* interpreted injury-in-fact to mean actual abuse of the plaintiffs' data.⁹⁶ Although both of these definitions appear to follow logically from the most basic and easily cognizable harm—physically tangible harm—the courts could have selected any number of alternate definitions. As in *Clapper*, neither court explained its process or reasoning for selecting this definition of harm to the exclusion of alternate definitions.

For example, a control theory analysis would likely suggest that harm arises not only from misuse of the data but also from the breach itself. In both *Pisciotta* and *Reilly*, customers chose to share information with a trusted institution for a particular purpose; when malicious third parties hacked the defendants' computer systems, customers lost control over who had access to their personal information.⁹⁷ The probability need not be nearly as high as the *Reilly* court would require for the breach to cause feelings of powerlessness and anxiety.

The *Pisciotta* court's "increased risk" analysis overlaps with control theory, but it is not coextensive. Harm under control theory would not necessarily require an increased risk of exposure, as the harmful sense of powerlessness stems from the *perception* of loss of control over personal information, regardless of whether an increased risk of harm can be statistically proven. However, this sense of powerlessness is likely enhanced in a situation where data breach increases the risk of exposure, since increased risk likely corresponds to increased perception of loss of control.

These courts could have alternately applied the personhood theory, although the connection to personhood theory is more tangential. If individuals generally lose faith in electronic storage practices and become concerned that their data is unsafe in the hands of third parties as a result of the data breach, they may begin to avoid or censor their data-generating activities in order to preempt their exposure. Again, because such a response would stem from individuals' perceptions, this harm could occur regardless of the probability of future harm or whether breach has increased that probability.

95. *Pisciotta v. Old Nat'l Bancorp*, 499 F.3d 629, 634 (7th Cir. 2007).

96. *Reilly*, 664 F.3d at 42.

97. *See Pisciotta*, 499 F.3d at 632; *Reilly*, 664 F.3d at 40.

However, this line of analysis would lead to justiciability problems, because the loss of faith argument could also extend to those who have not even been victim to the data breach. For example, when online shopping technologies first entered the marketplace, many users feared that their transactions would not be secure and therefore refrained from making purchases online.⁹⁸ Thus, self-censorship or feelings of anxiety over control of information can arise from the fear of new technologies or from observation of others' compromised personal information. But, even if courts were to consider such an open-ended definition of harm, the underlying cause of action could curtail lawsuits from parties whose data was not actually breached.

Thus, while some definitions of harm are more applicable or feasible than others in the privacy breach context, the availability of multiple definitions of harm indicates that the courts in question did make a choice to select some types of harm over others for the purpose of evaluating standing, with little explanation. Regardless of whether one views the outcome of such decisions as correct, the reasoning behind selecting the chosen definition is incredibly opaque—perhaps even to the judges rendering the decisions—and therefore runs the risk of excluding plaintiffs who have suffered harm according to the underlying cause of action but not according to the harm the judge elects to evaluate for establishing injury-in-fact.

B. *EDWARDS* AND THE NINTH CIRCUIT RULE: STATUTORY VIOLATION AS STANDING

With its decision in *Edwards v. First American Financial Corp.*,⁹⁹ the Ninth Circuit established a new way of addressing the injury-in-fact requirement of Article III standing: leaving the definition to the legislature's discretion. In *Edwards*, the Ninth Circuit held that statutes that grant plaintiffs a private right to enforce statutory violations also impliedly grant plaintiffs standing to do so.¹⁰⁰ In *Edwards*, the plaintiff alleged that referral agreements between title insurers and agencies violated the Real Estate Settlement Procedures

98. See Sabine Einwiller, *The Significance of Reputation and Brand for Creating Trust in the Different Stages of a Relationship between an Online Vendor and its Customers*, Proceedings of the Eighth Research Symposium on Emerging Electronic Markets, at 1–2 (September 2001), available at <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.58.2482&rep=rep1&type=pdf> (discussing consumers' initial concerns with the "privacy, security of monetary transactions, legal regulations, and proper delivery" of online commercial transactions in the early stages of online commerce).

99. 610 F.3d 514 (9th Cir. 2010).

100. *Id.* at 517.

Act.¹⁰¹ This Act did not premise recovery on plaintiffs' showing actual damages; the Act permitted plaintiffs to recover merely upon a showing that the defendant violated the statute.¹⁰² The court reasoned that if the legislature intended to grant damages on the basis of a statutory violation alone, it also implicitly intended for the plaintiff to have standing to pursue such damages.¹⁰³ Thus, the court held that although the plaintiff did not "allege[] that the charge for title insurance was higher than it would have been" without the statutory violation, and therefore could not establish any actual damages, the violation alone sufficed to establish standing.¹⁰⁴

The Supreme Court granted certiorari and heard arguments on *Edwards*. Although *Edwards* did not involve privacy law, a number of technology companies and consumer privacy advocates noted the impact that *Edwards* would have on statutory privacy law and filed amicus briefs.¹⁰⁵ The Court ultimately dismissed the writ as improvidently granted, allowing the Ninth Circuit to continue applying the *Edwards* standard and leaving in place a developing circuit split with broad implications for privacy law.¹⁰⁶

As the amici predicted, the Ninth Circuit has since applied the *Edwards* standard to cases arising under privacy statutes. In *In re Hulu Privacy Litigation*,¹⁰⁷ the Ninth Circuit found that plaintiffs had established standing by alleging that Hulu had breached the Video Privacy Protection Act.¹⁰⁸ Specifically, Hulu customers "allege[d] that Hulu wrongfully disclosed their video viewing selections and personal identification information to third parties such as online ad networks."¹⁰⁹ Although the plaintiffs did not present any evidence that the third parties had misused their personal information, the Ninth Circuit held that the plaintiffs had established standing under *Edwards*.¹¹⁰ They reiterated that "a plaintiff satisfies Article III's injury-in-fact

101. *Id.* at 515.

102. *Id.* at 517.

103. *Id.* at 518.

104. *Id.* at 516.

105. *See, e.g.*, Brief for Amici Curiae Facebook, Inc., LinkedIn Corp., Yahoo! Inc., and Zynga Inc. in Support of Petitioners, *First Am. Fin. Corp. v. Edwards*, 132 S. Ct. 2536 (2012) (No. 10-708), 2011 WL 3857211 (submitted by a coalition of technology companies); Brief of Amicus Curiae Electronic Privacy Information Center (EPIC) in Support of the Respondent, *First Am. Fin. Corp. v. Edwards*, 132 S. Ct. 2536 (2012) (No. 10-708), 2011 WL 4957381 (submitted by an organization that advocates on privacy policy).

106. *First Am. Fin. Corp. v. Edwards*, 132 S. Ct. 2536 (2012).

107. No. C 11-03764 LB, 2012 WL 2119193 (N.D. Cal. June 11, 2012).

108. *Id.* at *8–*9.

109. *Id.* at *1.

110. *Id.* at *8.

requirement by alleging a violation of a statutorily-created legal right . . . [including] a consumer privacy statute with a private right of action.”¹¹¹

Similarly, in *In re Facebook Privacy Litigation*,¹¹² the Northern District of California held that plaintiffs had established standing by alleging that Facebook “transmitted personal information about Plaintiffs to third-party advertisers without Plaintiff’s consent” in violation of the Wiretap Act.¹¹³ Because the Wiretap Act provides for a private right of action,¹¹⁴ the court held that the plaintiffs had established standing: “The injury required by Article III can exist solely by virtue of ‘statutes creating legal rights, the invasion of which creates standing.’”¹¹⁵

The Ninth Circuit in *Edwards* thus established a method of defining injury-in-fact that is completely deferential to the type of harm that the legislature had in mind when creating the statute. Such a straightforward and consistent method of assessing standing differs from the more traditional, but more inscrutable, majority approach employed in cases like *Clapper, Reilly*, and *Pisciotta*. The underlying goals of modern standing doctrine provide insight into understanding the impact and possible rationale of each method, as well as their individual flaws.¹¹⁶

111. *Id.* at *7.

112. 791 F. Supp. 2d 705 (N.D. Cal. 2011).

113. *Id.* at 708.

114. *Id.* at 712 (quoting 18 U.S.C. § 2520(a) (“[A]ny person whose electronic communication is ‘intercepted, disclosed, or intentionally used’ in violation of the Act may in a civil action recover from the entity which engaged in that violation.”)).

115. *Id.* at 711 (quoting *First Am. Fin. Corp. v. Edwards*, 610 F.3d 514, 517 (9th Cir. 2010)) (internal quotation marks omitted); *see also* *Graczyk v. West Pub. Co.*, 660 F.3d 275, 277 (7th Cir. 2011). In *Graczyk*, plaintiffs alleged that the DMV had sold the plaintiffs’ records to West Publishing in violation of the Driver’s Privacy Protection Act (“DPPA”), which prohibits unconsented disclosures of personal information. *Graczyk*, 660 F.3d at 276–77. The Seventh Circuit held that the plaintiffs had standing, as the DPPA gives private individuals a right of action: “The DPPA protects individuals from certain uses or disclosures of their personal information and creates a federal right of action for the same. . . . The plaintiffs allege . . . disclosure or use of the plaintiff’s personal information that is prohibited by the DPPA. . . . The plaintiffs have therefore alleged an injury in fact.” *Id.* at 278.

116. Strangely, in the Ninth Circuit it is much easier for plaintiffs to establish standing by framing the breach as a statutory violation than it would be if they had framed the same breach under a common law cause of action, because under a common law cause of action a plaintiff would need to independently establish injury-in-fact. This poses another problem and is outside the scope of this Note.

IV. COMPARING CURRENT STANDING JURISPRUDENCE WITH THE GOALS UNDERLYING STANDING

Having established the current state of standing jurisprudence in the constitutional and statutory privacy law context, this Part now compares these different standards of injury-in-fact with the underlying policy goals of the standing doctrine. Dean Erwin Chemerinsky expertly outlines the goals of the Article III standing requirement as fourfold: (1) promoting the separation of powers, (2) increasing judicial efficiency, (3) improving judicial decision-making, and (4) ensuring fairness by requiring that parties are sufficiently invested in the outcome of the case.¹¹⁷ This Part analyzes both traditional standing jurisprudence and the Ninth Circuit rule in light of these four goals and demonstrates that the policies underlying standing's injury-in-fact requirement do not support traditional standing jurisprudence in either the constitutional or statutory privacy law context.

A. PROMOTING THE BALANCE OF POWERS

One of the most prominent justifications for a stringent standing requirement argues that standing promotes the separation of powers by limiting the types of cases that the judicial branch can hear, thereby restricting its power in relation to the other two branches.¹¹⁸ Justice Antonin Scalia wrote in strong support of this justification in his watershed journal article, *The Doctrine of Standing as an Essential Element of the Separation of Powers*.¹¹⁹ Scalia noted that the Framers of the Constitution designed the judiciary to be removed from the whims of the majority so that it could serve the important role of “protecting individuals and minorities against impositions of the majority.”¹²⁰ However, he argued, granting the judicial branch too much power creates problems. Not only does governance by an appointed body undermine the nation’s democratic foundations, the judiciary is particularly ill-suited for dealing with all of the nation’s issues:

[Judges are] selected from the aristocracy of the highly educated, instructed to be governed by a body of knowledge that values abstract principle above concrete result, and . . . removed from all accountability to the electorate. That is just perfect for a body that is supposed to protect the individual against the people; it is just

117. CHEMERINSKY, *supra* note 18, at 57–59.

118. CHEMERINSKY, *supra* note 18, at 57 (advocating for “separation of powers by restricting the availability of judicial review”).

119. Antonin Scalia, *The Doctrine of Standing as an Essential Element of the Separation of Powers*, 17 SUFFOLK U. L. REV. 881 (1983).

120. *Id.* at 894.

terrible (unless you are a monarchist) for a group that is supposed to decide what is good for the people.¹²¹

Although this argument is persuasive when taken to the extreme, it does little to justify the current balance of powers. Current standing jurisprudence in the constitutional privacy law context, exemplified by *Clapper*, shifts the balance too far away from the judicial branch, such that U.S. citizens do not have any recourse to protect themselves against oppression by the legislative and executive branches. On the other hand, in the private-sector statutory privacy law context, the majority rule confers too much power on the judiciary, circumventing the legislature's attempts to protect consumers from evolving privacy threats and harms.

1. *Constitutional Challenges*

Traditional standing jurisprudence dictates an even higher degree of scrutiny “when reaching the merits of a dispute would force [the court] to decide whether an action taken by one of the other two branches of the federal government was unconstitutional.”¹²² However well-entrenched this axiom may be, current standing jurisprudence in the government surveillance context goes too far in the name of judicial restraint and, in doing so, frustrates the goals of the Framers of the Constitution.¹²³ For example, the Supreme Court's decision in *Clapper* effectively bars FISA surveillance from judicial review,¹²⁴ disrupting the balance of power in favor of the executive and legislative branches and tilting the scales of power in favor of the government at the expense of the governed.

121. *Id.* at 896.

122. *Raines v. Byrd*, 521 U.S. 811, 819–20 (1997). *See, e.g.*, *Clapper v. Amnesty Int'l*, 133 S. Ct. 1138, 1146 (2013) (“The law of Article III standing, which is built on separation-of-powers principles, serves to prevent the judicial process from being used to usurp the powers of the political branches.”).

123. *See* THE FEDERALIST NO. 78, 469 (Alexander Hamilton) (“[W]here the will of the legislature, declared in its statutes, stands in opposition to that of the people, declared in the Constitution, the judges ought to be governed by the latter rather than the former.”).

124. The Foreign Intelligence Surveillance Court (“FISC”), a special court composed of eleven federal district court judges, does hear surveillance warrant applications pursuant to the Foreign Intelligence Surveillance Act on an ex parte basis. *History of the Federal Judiciary: Foreign Intelligence Surveillance Court*, FEDERAL JUDICIAL CENTER, http://www.fjc.gov/history/home.nsf/page/courts_special_fisc.html (last visited Dec. 19, 2013). However, the Department of Justice has had an “almost perfect record” of “obtaining the surveillance warrants and other powers it requested from” FISC. *Id.*

a) *Clapper* Forecloses Judicial Review

The *Clapper* Court rejected the plaintiffs' argument that the Court's strict standing requirements would effectively shield surveillance requests, submitted pursuant to the FISA amendments, from judicial review, since the Foreign Intelligence Surveillance Court (FISC) evaluates each surveillance request.¹²⁵ Further, the Court asserted that if the government were to use information obtained through FISC-approved surveillance to prosecute someone, that individual "would certainly have a stronger evidentiary basis" and could thereby "challenge the lawfulness of the acquisition" in federal court.¹²⁶

However, even when the government charges a defendant based on evidence obtained through FISA surveillance, the government may avoid subjecting FISA to constitutional review by relying on alternative evidence.¹²⁷ In fact, until recently, the Justice Department's policy has been to withhold the information that FISA surveillance "was an early link in an investigative chain that led to evidence used in court. As a result, none of the defendants knew that they had the right to challenge the warrantless wiretapping law."¹²⁸

The Justice Department may be changing its policy. In October 2013, the "Department for the first time notified a defendant that evidence used against him" had been acquired pursuant to FISA.¹²⁹ This change in policy may provide more opportunities for defendants to challenge FISA's constitutionality. However, even if criminal defendants are able to challenge FISA, this challenge would still not adequately address the constitutionality of surveillance that targets individuals who are not suspected of criminal activity.¹³⁰

Several other factors also suggest that *Clapper* may effectively foreclose subjecting FISA to any meaningful constitutional review. First, based on the recitation of the facts in Justice Breyer's dissent, it seems unlikely that any plaintiffs, outside of the criminal justice system, would be more likely targets

125. *Clapper*, 133 S. Ct. at 1154–55.

126. *Id.* at 1154.

127. See Charlie Savage, *Federal Prosecutors, in a Policy Shift, Cite Warrantless Wiretaps as Evidence*, N.Y. TIMES (Oct. 26, 2013), available at <http://www.nytimes.com/2013/10/27/us/federal-prosecutors-in-a-policy-shift-cite-warrantless-wiretaps-as-evidence.html>.

128. *Id.*

129. *Id.*

130. The constitutionality of FISA in either case is outside of the scope of this Note. At this point, it is sufficient to observe that the national security interests involved when a criminal defendant challenges government surveillance render that question a completely separate one from the question posed by the *Clapper* plaintiffs.

of surveillance.¹³¹ Breyer first noted that the plaintiffs' communications with suspected and accused terrorists are exactly the type of information that Congress intended the executive branch to target under FISA.¹³² Plaintiffs described in the dissent include: an attorney representing clients who were acquitted of terrorism charges, as well as clients detained at Guantanamo Bay; an attorney representing an international client whom the United States had explicitly threatened; and a human rights researcher who "track[s] down people who were rendered by the CIA to countries where they were tortured."¹³³ If the targeting of such plaintiffs is not sufficiently certain to establish standing under Article III, the Court has set the bar prohibitively high.

Further, even if a plaintiff had actual evidence that his communications were targeted, the state secrets doctrine would likely prevent him from presenting his evidence in court.¹³⁴ Under the state secrets doctrine, the government may bar the disclosure of information upon reasonable showing that such disclosure would undermine national security.¹³⁵ Thus, even if plaintiffs do discover invasions of their privacy, "they may not be able to litigate based on their actual knowledge."¹³⁶ For example, in *Al-Haramain Islamic Foundation, Inc. v. Bush*, government prosecutors inadvertently gave criminal defendants information revealing that they had been surveillance targets.¹³⁷ However, the Ninth Circuit held that the disclosed document was protected by the state secrets doctrine and therefore could not be admitted into evidence or used to establish standing.¹³⁸

b) Verizon Customers' Cases Demonstrate the Dysfunction

Verizon customers, whose status as targets of surveillance is now widely known,¹³⁹ may be able to challenge the constitutionality of FISA under current standing rules. Revelations from June 2013 concerning the National

131. See *Clapper*, 133 S. Ct. at 1157–58 (Breyer, J., dissenting).

132. *Id.* at 1158.

133. *Id.* at 1157.

134. Scott Michelman, *Who Can Sue Over Government Surveillance?*, 57 UCLA L. REV. 71, 79–80 (2009).

135. *Id.*

136. *Id.*

137. 507 F.3d 1190, 1194–95 (9th Cir. 2007).

138. *Id.* at 1203.

139. See, e.g., Glenn Greenwald, *NSA collecting phone records of millions of Verizon customers daily*, THE GUARDIAN (June 5, 2013), available at <http://www.theguardian.com/world/2013/jun/06/nsa-phone-records-verizon-court-order>; Dan Roberts & Spencer Ackerman, *Anger swells after NSA phone records court order revelations*, THE GUARDIAN (June 6, 2013), available at <http://www.theguardian.com/world/2013/jun/06/obama-administration-nsa-verizon-records>.

Security Agency's (NSA's) collection of telephone metadata reveal that the NSA acquired a FISC order "requir[ing] Verizon on an 'ongoing, daily basis' to give the NSA information on all telephone calls in its systems, both within the US and between the US and other countries."¹⁴⁰ The order gave "the government unlimited authority to obtain the data for a specified three-month period."¹⁴¹ Verizon customers have since brought multiple lawsuits challenging this government action.¹⁴² Even under *Clapper's* strict standard, there is no question that the plaintiffs were *actually* the targets of surveillance, and therefore they will likely be able to establish an injury-in-fact.¹⁴³ Further, since the FISC order is already publicly available, the government may not be able to exclude it from evidence under the state secrets doctrine.¹⁴⁴

Supporters of the Court's heightened standing requirement in *Clapper* might argue that the Verizon plaintiffs' ability to establish standing demonstrates that *Clapper* did not foreclose judicial review of the FISA amendments. However, this does not demonstrate that the current standing jurisprudence is a workable system. Even if this set of plaintiffs succeeds in establishing standing, the law had to be broken for the necessary information to become available. This demonstrates a precedent so unworkable that citizens have to break the law to gain access to the courts to challenge the legality of potential government infringement of their rights.

c) Entirely Shielding Executive Action from Legislative Review
Constitutes an Inappropriate Balance of Powers

Chemerinsky points out that "concern for separation of powers also must include preserving the federal judiciary's role in the system of

140. Greenwald, *supra* note 139.

141. *Id.*

142. Complaint, *Klayman v. Obama*, No. 1:13-cv-00851 (D.D.C. June 10, 2013), *available at* <http://www.freedomwatchusa.org/pdf/130609-Verizon%20Complaint%20Class%20Action.pdf>; Complaint, *First Unitarian Church of Los Angeles v. NSA*, No. 3:13-cv-03287 (N.D. Cal. Sept. 10, 2013), *available at* <https://www.eff.org/document/first-unitarian-church-los-angeles-v-nsa-amended-complaint>; Complaint, *ACLU v. Clapper*, No. 13-cv-03994 (S.D.N.Y. June 11, 2013), *available at* https://www.aclu.org/files/assets/nsa_phone_spying_complaint.pdf.

143. *See ACLU v. Clapper – Challenge to NSA Mass Call-Tracking Program*, ACLU, <https://www.aclu.org/national-security/aclu-v-clapper-challenge-nsa-mass-phone-call-tracking> (last visited Dec. 19, 2013) ("The ACLU does not believe the issue of standing to be a problem in *ACLU v. Clapper* because of the FISC order showing that the NSA is collecting the telephone records of all Verizon Business customers – including the ACLU.").

144. *But see* J. Steven Gardner, *The State Secret Privilege Invoked in Civil Litigation: A Proposal for Statutory Relief*, 29 WAKE FOREST L. REV. 567, 585 (1994) ("Current standards do not require that information be classified as secret; nor do the standards require that the information not be in the public domain.").

government. Separation of powers can be undermined either by overexpansion of the role of the federal courts or by undue restriction.”¹⁴⁵ Current standing jurisprudence for constitutional challenges to government surveillance falls in the latter category, abdicating too much of the Court’s power. By creating a nearly insurmountable hurdle to judicial review, the Court displaces a doctrine that has played a key role in supporting the balance of powers since the days of *Marbury v. Madison*.¹⁴⁶

In crafting the balance of powers framework, and particularly the doctrine of judicial review, the Framers sought to restrict the power of the government as a whole and thereby prevent it from oppressing the people.¹⁴⁷ The judiciary plays an important role this balance by making sure that the actions of the executive and legislative branches do not run afoul of the written imperatives in the Constitution.¹⁴⁸ Without this check “the reservations of particular rights or privileges [in the Constitution] would amount to nothing.”¹⁴⁹

Thus, while the “anti-democratic” judicial branch should not entirely “usurp the powers of the [other] political branches,”¹⁵⁰ using standing doctrine to shield executive and legislative action from judicial review, as the Court did in *Clapper*, also contravenes the purposes of the balance of powers doctrine.

2. *Statutory Private-Sector Privacy Litigation*

The majority standing jurisprudence in the private-sector context fails for the opposite reason: by choosing not to hear causes of action that the legislature has explicitly sought to authorize through a private cause of action, courts are expanding, rather than limiting, their power at the expense of the legislature.¹⁵¹ Thus, far from protecting the traditional balance of powers, the “[c]ourt is *sub silentio* inserting into its ostensibly factual

145. CHEMERINSKY, *supra* note 18, at 58.

146. *See* *Marbury v. Madison*, 5 U.S. 137 (1803); *see, e.g.,* *United States v. Nixon*, 418 U.S. 683, 703 (1974) (“Many decisions of this Court, have unequivocally reaffirmed the holding of *Marbury v. Madison* that “[i]t is emphatically the province and duty of the judicial department to say what the law is.”); *Cooper v. Aaron*, 358 U.S. 1 (1958) (relying on judicial review to overturn Arkansas’s refusal to integrate schools).

147. F. Andrew Hessick, *Standing, Injury in Fact, and Private Rights*, 93 CORNELL L. REV. 275, 320 (2008) (“One of the principal functions of the judiciary is to serve as a check on the other branches by ensuring that the other branches do not violate the rights of the people.”).

148. *Id.*

149. THE FEDERALIST NO. 78, 469 (Alexander Hamilton).

150. *Clapper v. Amnesty Int’l*, 133 S. Ct. 1138, 1146 (2013).

151. *Fletcher*, *supra* note 47, at 233.

requirement of injury a normative structure of what constitutes judicially cognizable injury that [the legislature] is forbidden to change.”¹⁵²

This is especially problematic for privacy law where definitions of harm necessarily evolve with the introduction of new, more intrusive technology.¹⁵³ Warren and Brandeis, whose concerns over instantaneous photography instigated the rise of privacy tort law,¹⁵⁴ would be astonished at the rise of Big Data, GPS tracking, and other technologies that represent unprecedented access to individuals’ thoughts and actions. Although articulating the harm in this context is not an easy task, the legislature has taken the lead in attempting to define and remedy those harms it sees as the most damaging.¹⁵⁵ In many cases, the legislation also provides a private cause of action, indicating that the legislature envisioned consumers’ participation in the law’s enforcement. By denying consumers standing absent extraordinary circumstances, the judiciary is circumventing the legislature’s attempt to enable private enforcement.

For example, in *Sterk v. Best Buy Stores*,¹⁵⁶ plaintiffs claimed that Best Buy had unlawfully disclosed and retained personally identifiable information in violation of the Video Privacy Protection Act (VPPA).¹⁵⁷ The Northern District of Illinois held that because plaintiffs could not prove concrete economic damages, they did not have Article III standing.¹⁵⁸ However, the type of harm that the VPPA attempts to prevent is not a purely economic one; in most cases the disclosure of video rental records will not result in actual damages.¹⁵⁹ Despite this fact, the legislature chose to specifically provide for liquidated damages to encourage and enable even those unable to prove actual damages to bring suit against violating parties.¹⁶⁰ The fact that the statute explicitly includes such parties indicates that the legislature found

152. *Id.*

153. *See, e.g.*, Cable Communications Policy Act of 1984, 47 U.S.C. § 551 (protecting cable providers’ stored data); Video Privacy Protection Act of 1988, 18 U.S.C. §§ 2710, 2712 (protecting video rental data); Children’s Online Privacy Protection Act of 1998, 15 U.S.C. §§ 6501–6506 (restricting collection and use of Internet data pertaining to children); CAN-SPAM Act of 2003, Pub. L. No. 108-187 (prohibiting sending classes of unsolicited e-mails).

154. *See* Warren & Brandeis, *supra* note 1, at 195.

155. *See, e.g.*, H.R. REP. NO. 108-504, at 2–3 (2004) (describing need for legislation as protecting “individuals [who] have been subjected to a violation of their privacy, only to find it compounded when the pictures or photographs find their way to the Internet.”).

156. No. 11 C 1894, 2012 WL 5197901 (N.D. Ill. Oct. 17, 2012).

157. *Id.* at *1.

158. *Id.* at *6–*7.

159. *See* VPPA, 18 U.S.C. §§ 2710–2711 (2012).

160. *See* VPPA, 18 U.S.C. §§ 2710(c)(1)–(2)(A) (“Any person aggrieved by any act of a person in violation of this section may bring a civil action in a United States district court. The court may award . . . not less than liquidated damages in an amount of \$2,500.”).

non-economic and non-physical harm worthy of vindication. When courts require a separate showing of harm, beyond the harm the legislature impliedly considered important enough to protect, they essentially nullify the legislature's judgment, replacing it with their own—an act that expands, not circumscribes, judicial power.

B. EFFICIENCY

Article III's standing requirement is also said to “serve judicial efficiency by preventing a flood of lawsuits by those who have only an ideological stake in the outcome.”¹⁶¹ This goal is not convincing in the case of lawsuits against the government. Even in the private sector, the Ninth Circuit rule likely does not substantially affect judicial efficiency. However, granting access to a larger number of plaintiffs may have a negative impact on industries that work with large amounts of consumer data.

1. *Constitutional Challenges*

As a primary matter, under the doctrine of collateral estoppel, the Court will only need to make a decision on the constitutionality of a government action, such as a particular surveillance procedure, once: “Under collateral estoppel, once a court has decided an issue of fact or law necessary to its judgment, that decision may preclude relitigation of the issue in a suit on a different cause of action involving a party to the first case.”¹⁶² Thus, if the Court had ruled on the merits in *Clapper*, it would not have to rule on the same issue again against a different set of plaintiffs. In fact, denying standing in *Clapper* may have been the Court's least efficient option, as now that Verizon customers have more evidence to help them establish standing, in the form of a FISC order authorizing the NSA to target their phone conversations, multiple parties are challenging FISA's constitutionality for a second time.¹⁶³

Moreover, the Supreme Court has repeatedly stated that efficiency justifications do not prevail over important constitutional considerations: “[T]he Constitution recognizes higher values than speed and efficiency. . . . [The Bill of Rights was] designed to protect the fragile values of a vulnerable citizenry from the overbearing concern for efficiency and efficacy”¹⁶⁴

161. CHEMERINSKY, *supra* note 18, at 58.

162. *Allen v. McCurry*, 449 U.S. 90, 94 (1980).

163. *See supra* note 142.

164. *Stanley v. Illinois*, 405 U.S. 645, 656 (1972); *see also Reed v. Reed*, 404 U.S. 71 (1971) (holding that efficiency concerns are not sufficient to overcome even rational basis test).

Judicial efficiency concerns therefore do not justify the Court's decision in *Clapper*.

2. *Private-Sector, Statutory Suits*

Even in the private-sector, statutory context, traditional efficiency arguments, which focus on the burden on the court system, do not hold much weight. The Supreme Court has expressed concern that forgoing a stringent injury-in-fact standard would result in an onslaught of new litigation that would hinder the administration of justice. For example, Justice Powell's concurrence in *United States v. Richardson* expressed concern that "we risk a progressive impairment of the effectiveness of the federal courts if their limited resources are diverted increasingly from their historic role"¹⁶⁵

However, in the privacy context, the small amount of potential recovery per plaintiff and large costs of litigation often compel plaintiffs to organize into class action lawsuits. Thus, for example, even though Facebook's alleged violation of California's right of publicity law in *Fraley v. Facebook* affected 150 million users,¹⁶⁶ the federal court system did not have to deal with 150 million lawsuits. Rather, plaintiffs consolidated their claims into a single lawsuit, transferring the burden and administrative headache from the court system to the lead plaintiff and his attorneys, while also allowing plaintiffs—who might not otherwise consider the value of filing an individual lawsuit worth the cost and effort—to recover for the harm inflicted upon them.

Although class actions are relatively efficient for the court system, they may result in astronomical judgments for minor statutory violations, which may place a heavy burden on companies that collect and use large amounts of consumer data.¹⁶⁷ Even a minor violation, when multiplied by millions of affected users can result in a "multi-billion dollar statutory damages claim—without [any] class member having suffered any [economic] injury from the practice or act at issue."¹⁶⁸

165. *United States v. Richardson*, 418 U.S. 166, 192 (1974) (holding that plaintiffs could not establish standing as a taxpayer by alleging that a government agency had wasted taxpayer money).

166. *Judge Approves \$20 million settlement in Facebook class-action lawsuit*, THE RAW STORY (Aug. 26, 2013), <http://www.rawstory.com/rs/2013/08/26/judge-approves-20-million-settlement-in-facebook-class-action-lawsuit/>.

167. See Brief of Amicus Curiae Facebook Inc., LinkedIn Corp., Yahoo! Inc., and Zynga Inc. in Support of the Petitioners, *First Am. Fin. Corp. v. Edwards*, 132 S. Ct. 2536 (2011) (No. 10-708), 2011 WL 3857211, at *17.

168. *Id.* at *3. See, e.g., Cory L. Andrews, *Two Cheers For Judicial Actions In Facebook, Ebay Class Action Settlements*, FORBES (Aug. 29, 2013), <http://www.forbes.com/sites/wlf/2013/08/29/two-cheers-for-judicial-actions-in-facebook-ebay-class-action-settlements/> (describing \$20 million Facebook settlement regarding the use of "likes" to advertise to friends through

In addition to the danger posed to individual defendant companies, excessive litigation may have a negative impact on the economy by discouraging companies from innovating in fields that rely on consumer data or by tying up too much corporate energy and capital in litigation.¹⁶⁹ Thus, courts may wish to protect defendants, and industry in general, by reducing the overall number of lawsuits using a stricter definition of harm than the legislature intended.

Nonetheless, plaintiffs' and plaintiffs' attorneys' inclinations towards frivolous litigation may not be as strong as some fear. Since a class action attorney and lead plaintiff will both "need to invest his or her time and money to bring a civil suit; [this] will further help to limit litigation to plaintiffs with significant personal interest in the matter."¹⁷⁰ Despite the potential to receive a lucrative settlement or judgment, lead plaintiffs and their attorneys may not be willing to invest this amount of time and energy in claims that are sure losers.¹⁷¹

Further, legislatures are likely aware of the potential burden of excessive litigation and are capable of managing the floodgates by fine-tuning the legislation itself. The legislature's ability to craft nuanced and context-specific standing and substantive requirements makes it more capable of reacting to or preempting negative economic impacts and emerging technologies than a one-size-fits-all standing requirement.

sponsored stories, and noting that plaintiffs suffered no economic injury); Debra Cassens Weiss, *Netflix Notifies Customers of Class Action Settlement; Privacy Groups Will Benefit*, ABA JOURNAL (Aug. 1 2012), http://www.abajournal.com/news/article/netflix_notifies_customers_of_class_action_settlement_privacy_groups_will_b/ (describing \$9 million Netflix settlement for retaining customer data more than one year after cancelling service). This is especially true in situations where defendants may not even be particularly culpable. For example, the unauthorized access to a large number of user accounts may be caused by the website's poor security, but it could also be caused by a phishing scheme, wherein a malicious third party tricks users into disclosing their passwords, without any actual breach of the defendant's software.

169. In a study titled "The Impact of U.S. Internet Privacy Regulations on Early-Stage Investment," Booz & Co. "found that uncertain, potentially large damage awards, make[] early-stage investors uncomfortable with investing in that space." BOOZ & CO., THE IMPACT OF U.S. INTERNET PRIVACY REGULATIONS ON EARLY-STAGE INVESTMENT: A QUANTITATIVE STUDY 22 (2011), available at <http://www.booz.com/media/file/BoozCo-Impact-US-Internet-Privacy-Regulations-Early-Stage-Investment.pdf>.

170. Patricia Cave, Note, *Giving Consumers a Leg to Stand On: Finding Plaintiffs a Legislative Solution to the Barrier from Federal Courts in Data Security Breach Suits*, 62 CATH. U. L. REV. 765, 793 (2013).

171. *But see* AT&T Mobility LLC v. Conception, 131 S. Ct. 1740, 1752 (2011) (noting "even a small chance of a devastating loss" may compel defendants to settle even obviously non-meritorious lawsuits).

For example, a legislature could limit the flood of data breach litigation—while still giving plaintiffs the opportunity to protect themselves—by requiring that plaintiffs purchase credit-monitoring services as an element of the cause of action itself.¹⁷² The legislature could thereby “ensure that plaintiffs will not assert broad and unfounded claims based on a hypothetical fear of identity theft.”¹⁷³ Further, by limiting recovery to the cost of credit-monitoring services, the legislature could “guarantee[] that recovery is limited to actual expenses incurred by a plaintiff because of a business’s noncompliance with regulatory standards for data security management.”¹⁷⁴

The legislature could also limit liability by fundamentally changing the nature of the underlying cause of action. For example, Professor Jane K. Winn has suggested that security breach notification laws would more effectively reduce security breaches if the legislature replaced the current strict liability regime with a statutorily defined negligence standard.¹⁷⁵ Sanctions could be tied to the “wrongfulness of the conduct that led to the breach,” rather than “the volume of the data exposed,”¹⁷⁶ and would therefore preclude large judgments or settlements for minor statutory violations.

Thus, while the Ninth Circuit rule may initially create negative economic impacts, a judicially determined standing requirement is not the only way to limit frivolous litigation. In fact, the legislature has more tools at its disposal to control the number of plaintiffs who have access to the courts.

C. IMPROVING JUDICIAL DECISION-MAKING & ENSURING FAIRNESS

Finally, proponents of a strict standing requirement argue that the requirement improves judicial decision-making and ensures fairness.¹⁷⁷ Strict standing requirements, it is said, “improve judicial decision-making by ensuring that there is a specific controversy before the court and that there is an advocate with a sufficient personal concern to effectively litigate the

172. Cave, *supra* note 170, at 793.

173. *Id.*

174. *Id.*

175. Jane K. Winn, *Are “Better” Security Breach Notification Laws Possible?*, 24 BERKELEY TECH. L.J. 1133, 1160 (2009).

176. *Id.* at 1159–60.

177. The “fairness” justification is typically applied when referring to prudential standing, rather than Article III standing. *See, e.g.*, Singleton v. Wulff, 428 U.S. 106, 113 (1976) (holding that fairness may dictate “hesitat[ion] before resolving a controversy, even one within their constitutional power to resolve”); Miller v. Albright, 523 U.S. 420, 422 (1998) (“This Court applies a presumption against third-party standing as a prudential limitation on the exercise of federal jurisdiction.”). However, for the sake of thoroughness, this Note addresses any potential relevance to Article III standing here.

matter.”¹⁷⁸ The injury-in-fact requirement is said to encourage fairness “by ensuring that people will raise only their own rights and concerns and that people cannot be intermeddlers trying to protect others who do not want the protection offered.”¹⁷⁹ To frame this justification in a different way, standing encourages fairness by “ensur[ing] that the legal remedies of primary victims of wrongful conduct will not be usurped by persons trivially or not at all harmed by the wrong complained of.”¹⁸⁰

Both these justifications present widely recognized problems. In some cases the particular plaintiff bringing suit may have little bearing on the accuracy or fairness of a case’s outcome, as “some cases present pure questions of law in which the factual context is largely irrelevant.”¹⁸¹ For example, if a city government were to entirely ban abortions, the constitutional question of whether such a policy violated citizens’ due process right to decisional privacy would not depend much on who was suing the city.¹⁸² Further, “the insistence on a personal stake in the outcome of the litigation is a very uncertain guarantee of high quality advocacy.”¹⁸³ For example, a pro se applicant may be fully invested in his case but may lack the skills required to effectively present it. In contrast, a top litigator may be so skilled at presenting a case that it does not matter that the facts do not relate to him personally.¹⁸⁴ Finally, “standing requirements might be quite unfair if they prevent people with serious injuries from securing judicial redress.”¹⁸⁵

178. CHEMERINSKY, *supra* note 18, at 58; *see also* Baker v. Carr, 369 U.S. 186, 204 (1962) (holding that plaintiff must allege “such a personal stake in the outcome of the controversy as to assure that concrete adverseness which sharpens the presentation of issues upon which the court so largely depends for illumination of difficult and constitutional questions”).

179. CHEMERINSKY, *supra* note 18, at 59.

180. *Am. Bottom Conservancy v. U.S. Army Corps of Eng’rs*, 650 F.3d 652, 656 (7th Cir. 2011); *see also* Valley Forge Christian Coll. v. Ams. United for Separation of Church & State, Inc., 454 U.S. 464, 473 (1982) (quoting *United States v. SCRAP*, 412 U.S. 669, 687 (1973)) (“The federal courts have abjured appeals to their authority which could convert the judicial process into ‘no more than a vehicle for the vindication of the value interests of concerned bystanders.’”).

181. CHEMERINSKY, *supra* note 18, at 59.

182. *Id.* It is possible to foresee a situation where a party who is actually in favor of the law brings a suit against it and then does a poor job of representing the case in order to preclude others from challenging the law. However, more interested parties may be able to counteract such a scheme by joining the lawsuits as co-plaintiffs. Perhaps even more importantly, it seems overkill to deny legal access to large swaths of good-faith plaintiffs in order to deter the seemingly small possibility of a bad-faith plaintiff.

183. *Id.*

184. *Id.* Justice Scalia agrees, explaining that:

[T]he doctrine is remarkably ill designed for its end. Often the very best adversaries are national organizations such as the NAACP or the American Civil Liberties Union that have a keen interest in the abstract

The fact that most privacy litigation is brought in the form of class action suits provides special context to the discussion of fairness and decision-making quality. The class certification requirements embodied in Federal Rules of Civil Procedure Rule 23(a)(3)—“the claims or defenses of the representative parties are typical of the claims or defenses of the class”—and Rule 23(a)(4)—“the representative parties will fairly and adequately protect the interests of the class”—already serve as a protection to make sure that “there is an advocate with a sufficient personal concern to effectively litigate.”¹⁸⁶ Further, plaintiffs have an incentive to find such a class representative as, even without stringent standing requirements, the outcome of a class action might vary a lot depending on who serves as lead plaintiff.

The difference in characterization of the affected plaintiffs by the majority and the dissent in *Clapper* demonstrates the importance of finding the best class representatives. The *Clapper* majority described plaintiffs merely as “attorneys and human rights, labor, legal, and media organizations whose work allegedly requires them to engage in sensitive and sometimes privileged telephone and e-mail communications with colleagues, clients, sources, and other individuals located abroad.”¹⁸⁷ The dissent, however, focused on certain lead plaintiffs, who may have had particularly strong cases.¹⁸⁸ As discussed above, the dissent describes an attorney representing clients who were acquitted of terrorism charges, an attorney representing an international client who was explicitly threatened by the United States, and a human rights researcher who “track[s] down people who were rendered by the CIA to countries where they were tortured.”¹⁸⁹ This difference in characterization may have resulted from the majority and dissent viewing different lead plaintiffs as representatives of the class.

Thus, to succeed under a privacy class action lawsuit, plaintiffs are already constrained to select a lead plaintiff who has “sufficient personal concern to effectively litigate”¹⁹⁰ and who can present a specific and persuasive case.

question at issue in the case, but no ‘concrete injury in fact’ whatever. Yet the doctrine of standing clearly excludes them

Scalia, *supra* note 119, at 891.

185. CHEMERINSKY, *supra* note 18, at 59.

186. *See id.* at 58. To the extent that unnamed plaintiffs are not able to control who represents them as lead plaintiff in a class action lawsuit, they do, at least, have the ability to opt out and bring their own class action.

187. *Clapper v. Amnesty Int’l*, 133 S. Ct. 1138, 1145 (2013).

188. *Id.* at 1156–57 (Breyer, J., dissenting).

189. *Id.*

190. CHEMERINSKY, *supra* note 18, at 58.

D. A PROPOSED FIFTH GOAL: FLEXIBILITY

Perhaps most importantly, the *Edwards* standard does a better job of drawing a line that grants access to worthy plaintiffs while protecting defendants and courts from unworthy plaintiffs and cases. Current standing jurisprudence represents an understanding that the definition of injury-in-fact must apply in the same way to every cause of action.¹⁹¹ Judges are thus required to draw a single line over a varied and complicated legal landscape. Courts therefore determine standing based on the extension of or analogy to already-established, acceptable types of harm, rather than identifying the proper balance of access for a given area of law. This is a particularly strained process in the privacy context, where the types of harm at issue are substantially different from traditional types of harm. As a result, the application of the injury-in-fact requirement is unpredictable—it is difficult to predict what type of extension or analogy a court will use. Worse still, it can never be precise enough to achieve the desired effect of granting access to worthy plaintiffs while barring unworthy claims.

The underlying cause of action for any given case already represents a sorting of worthy and unworthy claims on a more context-specific level. In relying on the harm implicated by the underlying cause of action, the Ninth Circuit's *Edwards* standard therefore not only eliminates duplicate work but also achieves a more narrowly tailored method of sorting.

1. *Applying the Edwards Standard to Constitutional Context*

The problem with current standing precedent for cases challenging the constitutionality of government surveillance is not simply that it prevents too many people from challenging government actions; the problem is that the harm required to challenge government action is not coextensive with the harm that the Constitution seeks to protect.

The Bill of Rights addresses a series of implied harms that the Framers of the Constitution found to be particularly pernicious. For example, the Framers created and ratified the Fourth Amendment in response to the colonial general warrants and writs of assistance, which gave colonial governments unlimited authorization to “search a man’s house, his person, his papers, and his effects.”¹⁹² Yet, even the most basic physical search of a citizen’s property does not necessarily result in physical or economic damage.

191. See Fletcher, *supra* note 47, at 223 (“As currently constructed, standing is a preliminary jurisdictional requirement, formulated at a high level of generality and applied across the entire domain of law.”).

192. *Olmstead v. United States*, 277 U.S. 438, 463 (1928).

Clearly though, the inclusion of such a prohibition in the Constitution indicates that the Framers sought to protect more than the physical and monetary. Because the Framers did not elaborate on the precise philosophical nature of the harm that inspired the Bill of Rights—nor could they predict the ways in which society would develop to recognize certain harms in light of advancing technology—the best way to analyze whether a plaintiff has been harmed in the way the Framers sought to prevent is by analyzing the substantive aspects of the plaintiff's case—that is, applying the constitutional prohibitions to the facts of the plaintiff's claim.¹⁹³

Because the Court held that the *Clapper* plaintiffs failed to establish standing, it remains unclear whether the FISA amendments violate the Constitution in the way that the *Clapper* plaintiffs claimed. Regardless of the answer to this question, it is troubling that the Court considered whether there was injury-in-fact without first looking at what would constitute injury under the First and Fourth Amendments. Unless the standing question of harm is merged with the harm implicated by the relevant portion of the Constitution, there is a chance that some people who have been harmed in a way that is constitutionally actionable will not be able to challenge the government, despite the Framers' intent to protect them.

2. *Evaluating Edwards in the Statutory Context*

In the statutory context, the court's exercise of power in asserting its definition of harm over that of the legislature not only upends the traditional balance of power, it also circumvents the best interests of the people by potentially excluding plaintiffs the legislature found to be worthy of protection. Privacy advocates have argued that “[p]rivacy is a concept too integral to the person and a right too essential to freedom to allow its manipulation to support just those ideas the government prefers.”¹⁹⁴ However, to the extent that a government body has to define harm in order to ensure its protection, the legislature is in the best position to do so.

While the judiciary's role is important for enforcing a constitutional minimum, when the legislature enacts legislation that rises above this minimum, its definition of harm should be given deference for two reasons. First, since the legislature is the most democratic branch, its definitions of harm are the most likely to reflect the types of harm that the citizenry views as worthy of protecting. Secondly, “[i]n circumstances involving dramatic

193. See Fletcher, *supra* note 47, at 224 (“If a duty is constitutional, the constitutional clause should be seen not only as the source of the duty, but also as the primary description of those entitled to enforce it.”).

194. *Sorrell v. IMS Health, Inc.*, 131 S. Ct. 2653, 2672 (2011).

technological change,” the legislature is best “suited to gauge changing public attitudes, to draw detailed lines, and to balance privacy and [other interests] in a comprehensive way.”¹⁹⁵ As Professor Orin Kerr explains: “Legislatures can enact comprehensive rules based on expert input and can update them frequently as technology changes. As a result, legislatures can generate more nuanced, balanced, and accurate privacy rules when technology is in flux.”¹⁹⁶

The *Edwards* rule gives legislatures the power to define and redefine actionable privacy harms without hampering causes of action with less adaptive precedential requirements. In other words, as society and technology evolve together, the *Edwards* rule does the best job drawing a line of access to the court system that is closely tailored to the harms that society feels should be protected.

V. CONCLUSION: HOW TO TAILOR STANDING

The injury-in-fact requirement poses a difficult problem in the privacy context, as the appropriate definition of harm may depend on the type of privacy loss in question. Because current precedent requires courts to determine standing without referring to the underlying causes of action, it is unclear how judges should determine what type of harm applies.

Porting the Ninth Circuit’s standard to claims arising under the Constitution and under statutes, even those without liquidated damages, provides a clearer standard for judges when determining whether plaintiffs have suffered an injury-in-fact. In both cases, a court would simply grant standing if it determines that the defendants violated the underlying cause of action.¹⁹⁷ In the constitutional law context, this would avoid scenarios like *Clapper*, where the standing requirement upended the balance of powers by shielding the executive branch’s surveillance programs from constitutional review. The Ninth Circuit’s standard may also be more efficient because the

195. *United States v. Jones*, 132 S. Ct. 945, 964 (2013) (Alito, J., concurring).

196. Orin S. Kerr, *The Fourth Amendment and New Technologies: Constitutional Myths and the Case for Caution*, 102 MICH. L. REV. 801, 807–08 (2004).

197. The courts would still need to require some nexus between the violation and the plaintiffs. Even in *Edwards* the court did not go so far as to extend standing to all citizens. The plaintiffs were First American’s customers at the time the violation occurred. *Edwards v. First Am. Fin. Corp.*, 610 F.3d 514, 516 (9th Cir. 2010). The nature of this nexus lies beyond the scope of this Note. Suffice it to say that the nexus requirement would not pose as high of a barrier as the majority of jurisdictions’ judicially defined injury-in-fact requirement.

Court can decide once on a constitutional issue without having to hear different plaintiffs' repeated attempts to establish standing.¹⁹⁸

In the statutory law setting, the Ninth Circuit's approach better serves the goal of balancing the three branches of government because it does not give the judicial branch the power to completely override the legislature's conceptualization of harm and attempted solutions. Although the Ninth Circuit's approach may result in greater exposure to liability for those industries that deal with consumer information, the legislature could limit liability by imposing other requirements—for example, proof of actual damages—as an element of a particular underlying claim.

Further, merging standing with substance provides more clarity, thereby encouraging settlement and rendering the litigation process *more* efficient. When the law is clearer, parties can better evaluate the strength of their respective cases and can therefore negotiate more knowledgeably. With a shared understanding of the contours of the law, it would likely be easier for the parties to reach settlements, and the resulting agreements would likely include more predictable and reasonable settlement amounts. Settlements that accurately reflect the relative strength of the parties' cases are efficient for everyone. They reduce the court's role and the burden on the judicial system. They also save plaintiffs and defendants the costs of litigation.

The injury-in-fact requirement, as it stands in the majority of jurisdictions, introduces more uncertainty, as it premises access on an opaque and malleable process of defining "harm." When the law is less clear, parties may be more inclined to continue litigating, or defendants may choose to defend against a small probability of a larger judgment by settling for much more than a claim is worth. Thus, in this respect, current standing doctrine undermines the policy goal of efficiency.

Moreover, to the extent that increasing access to privacy causes of action would have a negative impact on the economy, the threat of suit may force the economy, and the technology industry in particular, to evolve such that companies are more careful about their choices of what kinds of data to collect. For example, it is currently very common for companies to collect social security numbers. The benefit the company derives from collecting this information pales in comparison to the devastating impact such information could have on consumers if the information is exposed.¹⁹⁹ In order to

198. See *supra* note 142.

199. See, e.g., Barbara Kiviat, *Guarding Your Social Security Number*, TIME (Dec. 4, 2007) <http://content.time.com/time/business/article/0,8599,1690827,00.html> ("Their computer system wouldn't let them process orders without a Social Security number, but if I called Verizon directly maybe they could do something different."); *id.* (describing a 1.5 hour-long

minimize the likelihood of data misappropriation, companies may choose to limit the types of information gathered to those that are narrowly tailored to their needs. Thus, even if the *Edwards* standard is less efficient in the short-term, it may lead to corporate practices that are not only more efficient in the long run, but also more protective of consumer privacy.

Although the injury-in-fact requirement for Article III standing is intended to serve as a tool for withholding court access from claims that are not socially beneficial, when the potential injury in question is a privacy harm, injury-in-fact is a difficult tool to utilize. Fortunately, it is also an unnecessary one. As the above analysis demonstrates, requiring judges to determine whether or not a plaintiff has suffered a privacy harm without looking at the definition implicated by the underlying cause of harm more often than not cuts against the goals of standing doctrine and leaves a great deal of confusion in its wake. The Ninth Circuit rule exemplifies a superior approach for adjudication of constitutional and statutory privacy issues.

ordeal trying to find a way around Verizon's requirement that people sign up for cell service with a Social Security number and concluding that all Verizon needed was two forms of identification, indicating that Verizon could perform the same function through less intrusive means); Adam Levin, *5 Places Where You Should Never Give Your Social Security Number*, HUFFINGTON POST (Mar. 28, 2013), http://www.huffingtonpost.com/adam-levin/identity-theft_b_2967679.html (“[M]any companies collect Social Security numbers they don’t need because they’re operating on autopilot. They’ve always done it, and their colleagues at other companies do it, so the practice continues and spreads on the strength of simple, dumb inertia.”).

SURVEY OF ADDITIONAL IP AND TECHNOLOGY LAW DEVELOPMENTS

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I. PATENT DEVELOPMENTS

A. BRILLIANT INSTRUMENTS, INC. V. GUIDETECH, LLC¹

In *Brilliant Instruments, Inc. v. Guidetech, LLC*, a declaratory judgment action for non-infringement, a divided panel of the United States Court of Appeals for the Federal Circuit held that even though an element of the claim is not in the infringing product or process, the infringing product or process may still infringe under the doctrine of equivalents.

Brilliant Instruments, Inc. (“Brilliant”) brought a declaratory judgment action of non-infringement against GuideTech, LLC (“GuideTech”) after the inventor of the patents left GuideTech to found Brilliant. The three GuideTech patents in this case involved circuits for measuring timing errors in microprocessors. One patent required two measurement circuits to be set up in parallel with each other within a “signal channel.” The two other patents required circuit components to be “operatively disposed in parallel.” Brilliant’s products sometimes operate within a single channel using two measurement circuits.

A United States District Court in the Northern District of California held that Brilliant’s products did not infringe any of the patents. The district court first found that Brilliant did not infringe the first patent because GuideTech presented insufficient evidence that Brilliant’s products had “multiple measurement circuits contained within a signal channel.” The district court also held that Brilliant did not infringe the other two patents because the components in Brilliant’s product were not set up in parallel. Because the components were not in parallel, the district court found that the products could not infringe the “operatively disposed in parallel” limitation, either directly or under the doctrine of equivalents.

The Federal Circuit, however, found that there was a genuine issue of material fact as to infringement of the first patent, and that the district court erred in granting summary judgment. The Federal Circuit noted that literal infringement could be found because the testimony of GuideTech’s expert witness showed that Brilliant’s product had multiple measurement circuits in a signal channel. Furthermore, the court explained that the claim construction language did not limit this finding.

1. 707 F.3d 1342 (Fed. Cir. 2013).

The Federal Circuit did agree with the district court that Brilliant did not directly infringe the other two patents, but it held that the district court erred in granting summary judgment based on the doctrine of equivalents, under which infringement occurs only if “any differences between the claimed invention and the accused product [are] insubstantial.” The Federal Circuit considered the proper application of the “function-way-result” and “insubstantial differences” tests for the doctrine of equivalents, which the United States Supreme Court described in *Warner-Jenkinson Co., Inc. v. Hilton Davis Chemical Co.*, 520 U.S. 17 (1997). The Federal Circuit reasoned that, under the function-way-result test, there was evidence that Brilliant’s circuits performed substantially the same function in substantially the same way to achieve substantially the same result as the patented claims. The Federal Circuit found that this test could be met even when the accused device did not have the claimed structure. Additionally, the court explained that the “vitiation” test is “not an exception to the doctrine of equivalents.” Particularly, the Federal Circuit found that “the vitiation test cannot be satisfied by simply noting that an element is missing from the claimed structure or process because the doctrine of equivalents, by definition, recognizes that an element is missing that must be supplied by the equivalent substitute.”

The Federal Circuit thus reversed summary judgment and remanded the case as to the first patent, finding questions of material fact on the issue of literal infringement. The court also reversed and remanded as to the two other patents in suit, finding questions of material fact as to whether or not there were substantial differences under the doctrine of equivalents.

Judge Dyk concurred with the finding of possible literal infringement on the first patent and no literal infringement on the other two patents, but he dissented as to the application of the doctrine of equivalents. He emphasized that “[t]he function-way-result test for equivalents requires ‘showing on a limitation by limitation basis that the accused product performs substantially the same function in substantially the same way with substantially the same result.’” Judge Dyk found that GuideTech’s expert witness applied this test to the invention as a whole instead of to the claim limitation at issue. Since Judge Dyk found no evidence that the difference between the claim limitation and the accused device was insubstantial, he would have affirmed summary judgment under the doctrine of equivalents.

B. *CUMMINS, INC. V. TAS DISTRIBUTING CO., INC.*²

In *Cummins, Inc. v. TAS Distributing Co., Inc.*, a unanimous panel of the United States Court of Appeals for the Federal Circuit held that res judicata (also referred to as “claim preclusion”) applied where (1) a declaratory judgment plaintiff failed to raise patent defenses in an earlier lawsuit, and (2) that earlier lawsuit reached a final resolution on the merits and involved the same parties and operative facts.

TAS Distributing Co., Inc. (“TAS”) developed and marketed patented technology for automatically starting and stopping diesel engines. Cummins, Inc. (“Cummins”) licensed this technology from TAS, agreeing to pay royalties on sales of products that used TAS’s patented technology. Cummins further agreed to a minimum \$1 million royalty payment in the first five years, to make “all reasonable efforts to market and sell [products using the TAS patents] . . . to maximize the payment of royalties [under the license],” and to make ongoing royalty payments. Cummins struggled to make sales in the market, but it paid the minimum royalty required under the contract.

In 2003, TAS sued Cummins in the Central District of Illinois for breach of license for failure to make all reasonable efforts to market and sell the products (*TAS I*). Cummins defended itself by claiming that it did, in fact, make all reasonable efforts; it furthermore counterclaimed that the license and the obligation to pay royalties were about to expire. The trial court found that TAS failed to present proof of damages, and it granted summary judgment to Cummins for no breach. It also found that Cummins had ongoing obligations to pay royalties.

In 2007, TAS sued Cummins again in the Central District of Illinois for breach of license for failing to pay royalties on sales of products incorporating TAS patents (*TAS II*). In *TAS II*, deposition testimony by the inventor of the TAS patents indicated that the inventor failed to disclose to the Patent and Trademark Office during patent prosecution that he knew of prior sales and marketing efforts of the invention before the critical date. In response, “Cummins sought leave to amend its Answer to include patent-based affirmative defenses and counterclaims. . . .” The district court denied amendment because the claims should have been brought in *TAS I* and were therefore barred under res judicata.

Before the court in *TAS II* issued the order denying amendment, Cummins filed a separate declaratory judgment action in the United States District Court for the Central District of Illinois to dismiss the other suit, claiming

2. 700 F.3d 1329 (Fed. Cir. 2012).

that the patents were invalid for inequitable conduct and invalidity, thereby voiding the license agreement (*TAS III*). Cummins argued that it should receive an equitable exception to res judicata because of the contractual misrepresentations that TAS made. The court denied Cummins's request due to evidence and testimony indicating the Cummins knew of the potentially invalidating sales when it entered into the license. Further, evidence of these sales had also surfaced in *TAS I*. Before the *TAS II* order issued, the *TAS III* court granted summary judgment to TAS because all of Cummins's claims were barred under the doctrine of res judicata. Cummins appealed.

The Federal Circuit affirmed the district court's grant of summary judgment after applying the three conditions required for res judicata in Illinois: (1) there was a final judgment on the merits, (2) the earlier and later suits involved the same causes of action, and (3) the earlier and later suits involved the same parties. Cummins challenged the district court's decision on three grounds: (1) the court in *TAS I* lacked subject matter jurisdiction to hear patent-related defenses, (2) different transactional facts were present in the two cases, and (3) Cummins had an equitable exception to res judicata.

The Federal Circuit first found no jurisdictional bar to res judicata. Although *TAS I* was a declaratory judgment action for enforcing a license, Cummins could have raised a patent defense in that case. Further, there were also contract claims against which Cummins could have raised patent defenses.

In affirming the decision in *TAS III*, the Federal Circuit echoed the district court finding that the two cases involved the same transaction. The court found that the validity of the license was an operative issue in *TAS I*, which Cummins could have contested as a defense or counterclaim. The court took a narrow reading of *Mercoïd Corp. v. Mid-Continent Investment Co.*, 320 U.S. 661 (1944), where the Supreme Court held that res judicata did not apply to foreclose a defense of patent misuse, even though it could have been raised in an earlier case. The court noted that *Mercoïd* only applied to patent misuse as a defense to a claim of infringement, not for attacking a contract claim or an earlier judgment. The court further found that allowing invalidity defenses would risk nullification in the *TAS I* case, since part of that opinion found an ongoing obligation for Cummins to pay royalties to TAS.

Finally, the Federal Circuit upheld the district court finding that equitable exceptions to res judicata do not apply under Illinois law. The court also agreed with the district court finding that Cummins was aware of the basis for invalidity claims during *TAS I*, rendering any misrepresentation exception inapplicable.

C. *DEY, L.P. V. SUNOVION PHARMACEUTICALS, INC.*³

In *Dey, L.P. v. Sunovion Pharmaceuticals, Inc.*, the United States Court of Appeals for the Federal Circuit reversed the district court's holding that the defendant's clinical study constituted an invalidating "public use" within the meaning of 35 U.S.C. § 102(b), and remanded the case for further proceedings.

Defendant Sunovion and plaintiff Dey simultaneously developed pharmaceutical products to treat pulmonary disease and owned the relevant patents. Sunovion began a Phase III clinical trial in February 2002, and ultimately developed a commercial product, Brovana, in 2007. Prior to the launch of Brovana, Dey brought suit against Sunovion for infringement of its patents. Sunovion moved for partial summary judgment on the question of invalidity.

In its motion, Sunovion conceded that the composition of its clinical trial product fell within Dey's patented claims. It argued, however, that its own clinical trials constituted a prior public use of Dey's inventions under § 102(b). During Sunovion's clinical trials, participants were told the identity of the active ingredient, but not its specific formulation. Participants were not prohibited from discussing with others about the study, but signed a consent form stating that "the medications 'must be taken only by the person for whom it was intended' and that [they] would have to keep usage logs and return unused medications." Test administrators signed a confidentiality agreement that prohibited them from disclosing any proprietary information for five years. One percent of the formulated drug vials were "lost and not returned." The district court granted summary judgment for Sunovion and Dey appealed.

On appeal, the Federal Circuit noted that whether a prior use was an invalidating "public use" entails a two-prong test. The court asked "whether the purported use: (1) was accessible to the public; or (2) was commercially exploited." Factors to be considered include "the nature of the activity that occurred in public; the public access to and knowledge of the public use; [and] whether there was any confidentiality obligation imposed on persons who observed the use." The court stated that the same approach applies "when an unaffiliated third party is responsible for the allegedly public use."

The Federal Circuit reversed the district court's ruling, holding that issues of fact remained in dispute as to whether Sunovion's clinical trial constituted

3. 715 F.3d 1351 (Fed. Cir. 2013)

clear and convincing evidence of a prior public use. The court disagreed with the district court on two “fact-bound issues.” First, the court did not agree that the use of the particular “infringing” composition during the clinical trial was “unfettered and public.” The court noted that Sunovion required participants and test administrators to follow use restrictions as expressed in the consent form signed by participants and the confidentiality agreement signed by test administrators. The court also noted that the loss of a fraction of trial vials and the self-administration of the drug at home did not preclude a reasonable jury from concluding the clinical trial was “sufficiently controlled and restricted, rather than unfettered and public.”

Second, the court found it disputable whether the confidentiality obligations were “so loose.” The court noted that participants were “unaware of the specifics of the inventive formulations,” and that clinical investigators, “the most knowledgeable persons,” were under an obligation not to disclose. The court held that “[b]ecause a finder of fact could conclude that the study was conducted with a reasonable expectation of confidentiality as to the nature of the formulations being tested, summary judgment on the public use issue was inappropriate.” The court also noted that the confidentiality controls in the study were not unique, and that prior precedent “routinely rejected the argument that such an arrangement necessarily strips the trial of confidentiality protection or renders it accessible to the public.”

Finally, the court noted that the district court’s decision was “premised on several misconceptions.” The court stated that in determining “the adequacy of the confidentiality guarantees” the district court should examine “the party in control of the allegedly invalidating prior use.” In this case, that party was Sunovion, not Dey. The court also noted that determining whether the participants can discern “the claimed features of the invention” was important because what matters is the use of invention “within the meaning of the statute.” Accordingly, the court remanded the case to the district court for reconsideration on the merits.

Judge Newman dissented, and would have held that the clinical trial was not an invalidating public use. In her view, “[n]o sound reason appears for remanding for findings or trial, when the matter is readily resolved on undisputed facts. Nor is there any reason for casting judicial doubt on the standard confidentiality procedures of clinical trials, at this late date of decades of established practice.”

D. *EPLUS, INC. V. LAWSON SOFTWARE, INC.*⁴

In *ePlus, Inc. v. Lawson Software, Inc.*, the United States Court of Appeals for the Federal Circuit held that a software distributor—or its customers— infringed one method claim relating to online sales asserted by its competitor. However, the court held that the plaintiff’s system claims, which covered multi-catalog purchasing systems, were indefinite and therefore invalid. As a result, it reversed the district court’s finding on infringement as to those claims. The court also upheld a permanent injunction issued by the district court preventing the distributor from servicing and maintaining products it had already sold.

Plaintiff ePlus, a software distributor, owns U.S. Patent Nos. 6,023,683 (“’683 patent”) and 6,505,172 (“’172 patent”), which read on methods of “electronic sourcing.” These patents allow businesses and organizations to use computer networks to purchase goods from multiple online sources simultaneously. An important feature of the invention is an ability to divide a single requisition into multiple purchase orders, whereas older systems required users to generate a separate purchase order for each vendor. Lawson, ePlus’s competitor, sells computer software modules for supply chain management through a website that allows customers to buy “building blocks” of the larger program according to their needs. Lawson’s method for sourcing software products is nearly the same as ePlus’s method—the only difference is that Lawson’s software products are modular and ePlus’s are not.

The United States District Court for the Eastern District of Virginia excluded ePlus’s expert from testifying at trial and ruled in favor of ePlus, finding that Lawson had infringed both its method and system patent claims. On appeal, Lawson raised three arguments: (1) ePlus’s system claims were indefinite and lacked adequate disclosure for the “means for processing,” (2) the evidence of infringement of the method claims presented at trial was insufficient to prove actual infringement, and (3) the district court’s injunction order was impermissibly broad.

Relying on precedent, the Federal Circuit held that the ’683 patent’s specification did not disclose sufficient structure for the “means for processing” limitation. Thus, the court held that the system claims were invalid as indefinite. Key to the court’s decision was a finding that the specification did not disclose any structure that could generate purchase orders; it also failed to include instructions for using a particular piece of

4. 700 F.3d 509 (Fed. Cir. 2012).

hardware, employing a specific source code, or following a particular algorithm. The court explained that the specification lacked anything that would limit “the scope of the functional language in the means for processing element,” and it therefore held that the system claims were indefinite.

Lawson also claimed that ePlus failed to provide sufficient evidence to establish that Lawson or its customers could perform every step of the methods disclosed in claims 26, 28 and 29 of the '683 patent. The court rejected this argument as to claim 26 and found that the record contained sufficient evidence to allow a reasonable jury to conclude that Lawson not only infringed that claim, but also induced its customers to do so. With respect to claims 28 and 29, however, the court agreed with Lawson that the verdict of infringement was not supported by substantial evidence. For one step in method claim 28 relating to data conversion, ePlus did not present any evidence to the jury that at least one user actually operated the accused system to perform that step; it merely demonstrated that Lawson's software is capable of performing that step. Because claim 29 depends on 28, the court came to the same conclusion as to that claim.

Finally, the Court of Appeals held that the district court's injunction, which prohibited Lawson from servicing and maintaining products sold before the injunction issued, was not overly broad and therefore the district court did not abuse its discretion. The court then remanded for the district court to determine if this opinion required any changes to the injunctions terms. It also reversed the district court decision “that the system claims are not indefinite,” and vacated the district court's judgment of infringement entered against Lawson based on claims 28 and 29 of the '683 patent.

E. *GUNN V. MINTON*⁵

In *Gunn v. Minton*, the United States Supreme Court revisited the scope of federal subject matter jurisdiction over state claims that raise issues of federal law. It unanimously held that state courts have subject matter jurisdiction over legal malpractice claims, even if the claims' resolution may require the examination of federal issues.

Vernon Minton applied for a patent on an “Interactive Securities Trading System” on August 6, 1989. He was issued U.S. Patent number 6,014,043 (“the '043 patent”) on January 11, 2001. Minton later sued the National Association of Securities Dealers and the NASDAQ stock exchange for infringing his patent. Minton lost his patent infringement case because the

5. 133 S. Ct. 1059 (2013).

trial court held that more than one year prior to applying for the '043 patent, Minton had leased and offered for sale a computer program ("TEXCEN"), which included all of the '043 patent's elements.

The trial court found that Minton had not disclosed TEXCEN to the patent examiner, who therefore could not consider its effect on the patentability of the program described in his '043 patent. The trial court accordingly held that the '043 patent was invalid under the 35 U.S.C. § 102(b) on-sale bar, which prohibits patenting inventions that have been "on sale in this country, more than one year prior to the date of the application for patent in the United States."

Minton moved for reconsideration. His attorneys for the first time raised the experimental use defense to anticipation, asserting that Minton had leased TEXCEN for the purpose of software development and validation. They claimed that the lease therefore did not constitute his placing it "on sale" for purposes of § 102(b).

The district court declined to entertain Minton's motion for reconsideration. The Federal Circuit affirmed, holding that the district court was not required to entertain the untimely raised argument.

After losing his infringement case, Minton sued his attorneys for legal malpractice in a Texas state court. Minton alleged that their failure to raise the experimental use defense in a timely manner constituted professional negligence, and he sought \$100 million in damages. The state trial court granted defendants' motion for summary judgment, ruling that "Minton had put forward less than a scintilla of proof that the lease had been for an experimental purpose."

Minton appealed the trial court's decision in state appellate court, this time arguing that the trial court lacked subject matter jurisdiction to decide the case, since the malpractice claims arise from patent law cases and therefore implicate federal law. Accordingly, he argued, the trial court decision should be vacated, the case should be dismissed in state court altogether, and he should be permitted to bring the malpractice claims in federal district court. The state appeals court, citing federal precedent in the Fifth Circuit, held that Minton's legal malpractice claim did not arise under federal law and affirmed the trial court's dismissal of Minton's claim. The Texas Supreme Court reversed, holding that the case did involve a substantial federal issue, which created exclusive federal jurisdiction under 28 U.S.C. §1338(a).

The United States Supreme Court overturned the ruling of the Texas Supreme Court, clarifying and narrowing the Court's "arising under" jurisprudence, as reflected in *Grable & Sons Metal Products, Inc. v. Darue Engineering & Manufacturing*, 545 U.S. 308 (2005). The Court determined that

Minton's malpractice claim did not arise under the laws of the United States, since resolving the federal patent issue was not "significant to the federal system as a whole."

The Court held that the Texas Supreme Court had misapplied the four-part test established in *Grable*, which involved a state quiet title action subsequent to an IRS seizure. The *Grable* Court held that federal jurisdiction could lie in a traditionally state law claim "if a federal issue is: (1) necessarily raised, (2) actually disputed, (3) substantial, and (4) capable of resolution in federal court without disrupting the federal-state balance approved by Congress." In *Grable*, federal jurisdiction was proper because the substantiality of the federal interest supported federal question jurisdiction over the disputed issue.

Whereas the Texas Supreme Court held that Minton's state claim satisfied all four *Grable* elements, the United States Supreme Court found that Minton's claim "foundered" on the *Grable* test's third requirement, since "the federal issue in this case [was] not substantial in the relevant sense." The Court reasoned that "it is not enough that the federal issue be significant to the particular parties in the immediate suit. . . . The substantiality inquiry under *Grable* looks instead to the importance of the issue to the federal system as a whole."

The *Gunn* court held that even when a patent-related malpractice case necessarily will focus on federal issues, the resolution of these issues is relevant only to the litigants, not to the federal system in general. "Because of the backward-looking nature of a legal malpractice claim, the [federal] question is posed in a merely hypothetical sense. . . . No matter how the state courts resolve that hypothetical 'case within a case,' it will not change the real-world result of the prior federal patent litigation." Thus, Minton's claim failed to satisfy *Grable*'s substantiality inquiry.

The United States Supreme Court stated that it had long-recognized that federal courts have "exclusive jurisdiction of all cases arising under the patent laws, but not of all questions in which a patent may be the subject-matter of the controversy." The Court's unanimous decision in *Gunn* affirms the primary role of state courts in regulating the behavior of their licensed professionals. The *Gunn* Court held that cases which necessarily, but only hypothetically, involve the resolution of questions of federal law may be properly decided in state courts, since the federal issues thereby raised do not meet the substantiality requirement to establish exclusive federal jurisdiction under 28 U.S.C. § 1338(a).

F. *K-TECH TELECOMMUNICATIONS, INC. V. TIME WARNER CABLE, INC.*⁶

In *K-Tech Telecommunications, Inc. v. Time Warner Cable, Inc.*, the United States Court of Appeals for the Federal Circuit held that a direct patent infringement complaint that (1) properly uses Form 18 in the Appendix of Forms to the Federal Rules of Civil Procedure (“Form 18”) and (2) identifies the patent and claims in the patent that defendant allegedly infringed is sufficient on its face. The court also held that a direct patent infringement complaint does not require a plaintiff to identify potential non-infringing alternatives to practicing the claims of the asserted patent.

In 2011, K-Tech Telecommunications, Inc. (“K-Tech”) brought separate actions against Time Warner Cable (“TWC”) and DirecTV in the United States District Court for the Central District of California, alleging that the defendants directly infringed on four of its patents. K-Tech’s four patents involved systems and methods for translating digital television signals, specifically “for modifying a major channel number, a minor channel number, and/or a carrier frequency to identify a television program.” K-Tech’s complaint utilized Form 18, which provides a sample complaint for direct patent infringement and specifies a number of requirements for such a complaint. K-Tech’s complaint alleged that defendants were using methods and systems protected by its four patents to translate their digital TV signals.

DirecTV and TWC both moved to dismiss the original complaints under Federal Rule of Civil Procedure 12(b)(6) for failure to plead sufficient factual specificity to state a claim of direct patent infringement. The court granted both motions but also granted K-Tech leave to amend to cure its complaint. After K-Tech filed its First Amended Complaint, both defendants again filed motions to dismiss under Rule 12(b)(6). The district court granted both motions, pointing to K-Tech’s failure to explain in the complaint why defendants could not have been achieving the same end-results by using alternative, non-infringing methods. K-Tech appealed, stating that its complaint complied with Form 18 and that the district court applied an incorrect standard to determine the sufficiency of the complaint.

The Federal Circuit discussed Form 18 and its recent case *R+L Carriers, Inc. v. DriverTech LLC*, 681 F.3d 1323 (Fed. Cir. 2012), in which it held that the form suffices as a pleading standard for direct infringement. Form 18 provides as an example the statement “defendant has infringed . . . the [p]atent . . . by making, selling, and using electric motors that embody the

6. 714 F.3d 1277 (Fed. Cir. 2013)

patented invention.” The court found that Form 18 does not require a plaintiff to “identify and rebut” potential non-infringing methods that a defendant might be using to achieve the same end result. A plaintiff also does not need to identify the actual devices of defendants that allegedly utilize the patented methods. The court further held that a patentee only needs to plead facts sufficient to put a potential infringer on notice about what they must defend, and concluded that in the case at bar TWC and DirecTV knew what K-Tech’s patents claimed, and they knew what K-Tech claimed their systems were doing. The court restated in dicta that even in the case of a conflict between Form 18 and case precedent, the form takes precedence, since Federal Rule of Civil Procedure 84 ensures the pleading sufficiency of any complaint that properly uses a form in its appendix.

The court concluded that K-Tech’s complaint satisfied Form 18 by identifying the patents and the claims in the patents that the defendants were allegedly using, and that it therefore met the pleading requirements for a direct patent infringement case.

G. *IN RE MOTOROLA MOBILITY, LLC & GOOGLE, INC.*⁷

Google and its subsidiary Motorola Mobility LLC settled with the FTC following the FTC’s investigations into whether Google reneged on commitments to standard-setting organizations (“SSOs”) to license standard-essential patents (“SEPs”) to licensees under fair, reasonable, and non-discriminatory (“FRAND”) terms. Google allegedly filed injunctions and exclusion orders against licensees, breaking its commitment to the SSOs. The FTC stated that the alleged activities may have been a violation of § 5 of the Federal Trade Commission Act (15 U.S.C. § 45), which prohibits “unfair methods of competition.” As part of the settlement, Google agreed to license these patents under FRAND terms to licensees, but retained the right to file injunctions against licensees in certain situations.

An SSO is an “organization that produces and/or maintains standards or specifications under a defined process.” For example, the Institute of Electrical and Electronics Engineers (“IEEE”) sets many of the computing standards used by companies around the world. Many of the technologies that Motorola Mobility developed and patented—and that Google subsequently held after acquiring Motorola Mobility—were so effective that IEEE and other SSOs wanted to adopt them as industry standards. As part of the agreement between Google and the SSOs, these patents were declared SEPs, and Google agreed to license these patents to licensees under FRAND

7. No. C-4410, 2013 WL 3944149 (F.T.C. July 23, 2013).

terms. This common practice benefits the patent-holder by legitimizing the technology as an industry standard while benefitting licensees and the industry as a whole by allowing the patent to be used on fair terms.

Google allegedly reneged on these commitments, filing for injunctive relief and exclusion orders against its licensees. Motorola Mobility allegedly made many of these agreements and reneged on them before Google acquired the company in May 2012, and Google allegedly continued these practices after acquiring Motorola Mobility. The FTC investigated the details of this behavior to determine whether it constituted a violation of § 5 of the Federal Trade Commission Act.

In January 2013, the FTC announced that it had reached a preliminary settlement with Google and submitted a draft of the order for public comment, allowing members of the industry with a stake in the investigation to provide input. On July 24, 2013, the FTC published the final order, with changes made based on those public comments.

The order compelled Google to adhere to its commitments to license its SEPs under FRAND terms. In revising the order between January and July, the FTC made a few key changes in response to public comments. First, it removed language from the complaint alleging that Google “engaged in unfair or deceptive acts or practices.” Second, instead of preventing Google from pursuing any injunctive relief at all with regard to these patents, the FTC allowed Google to pursue injunctive relief in certain situations that may warrant such action. In the first version of the order, the FTC prevented Google from seeking any kind of injunctive relief with regard to these patents, a move that some criticized as a circumvention of Google’s intellectual property rights. Due to Google’s agreement to the order and the relative lack of punitive action, many consider this to be a major victory for Google.

H. *POZEN INC. V. PAR PHARMACEUTICAL, INC.*⁸

In *Pozen Inc. v. Par Pharmaceutical, Inc.*, the United States Court of Appeals for the Federal Circuit held, among other issues, that the essential inquiry in determining patent infringement under the doctrine of equivalents is whether the accused product contains elements identical or equivalent to each claimed limitation. One way of proving infringement under this doctrine is by showing, limitation by limitation, that the accused product performs substantially the same function in substantially the same way with substantially the same result as each claimed element of the patented product.

8. 696 F.3d 1151 (Fed. Cir. 2012).

Pozen Inc. (“Pozen”) invented a method for treating migraines by combining two drugs in a single tablet. One of them is a triptan, such as sumatriptan, while the other is a nonsteroidal anti-inflammatory drug (“NSAID”), such as naproxen. Pozen owns three patents that cover this invention.

Pozen markets a combination of sumatriptan and naproxen called Treximet. The appellants, Par Pharmaceutical, Inc. (“Par”), Alphapharm Pty Ltd. (“Alphapharm”), and Dr. Reddy’s Laboratories, Inc. (“DRL”), are generic manufacturers that filed Abbreviated New Drug Applications (“ANDAs”) with the FDA seeking approval to market a generic version of Treximet. The appellants’ ANDAs certified that Pozen’s patents are “invalid or will not be infringed” by the generics. Pozen sued the appellants in the U.S. District Court for the Eastern District of Texas on the grounds that the ANDA certification constituted a statutory act of infringement. Following a bench trial, the district court determined that the patents were valid and infringed by the ANDAs.

One of the patents, U.S. Patent No. 7,332,183 (“the ’183 patent”), claims a tablet with a triptan and an NSAID in separate layers that dissolve independently. The district court held that under the doctrine of equivalents, Par and DRL’s ANDA products infringed the ’183 patent. In claim 1 of the ’183 patent, substantially all of the triptan is in a first tablet layer, and substantially all of the naproxen is in a second, separate layer. The layers are arranged side by side such that dissolution of the naproxen occurs independently of the triptan.

The parties agreed that the term “dissolution of said naproxen occurs independently of said triptan” means “dissolution of naproxen . . . and triptan from the multilayer tablet . . . occurs in the same amount of time \pm 10% as when the same amount of naproxen . . . and triptan are given separately.” The district court construed the phrase “substantially all of said triptan is in a first layer of said tablet and substantially all of said naproxen is in a second, separate layer” as meaning “at least 90%, and preferably greater than 95%, of the total triptan present in the tablet is included within one distinct layer and at least 90%, and preferably greater than 95%, of the naproxen present in the tablet is included within a second distinct layer.”

One of the issues on appeal was infringement of the ’183 patent. The appellants challenged the district court’s finding that the accused products met the “independent dissolution” and “substantially all” limitations under the doctrine of equivalents.

With regard to the “independent dissolution” limitation, the appellants argued that Pozen did not prove independent dissolution because there was no evidence comparing the rate of dissolution of the ANDA products to that

of the agents individually, as required by the '183 patent. The Federal Circuit held that no such actual comparison was necessary because under the doctrine of equivalents, Pozen needed only to show that the ANDA products performed the same function in the same way to achieve the same result as the "independent dissolution" limitation. Because the district court properly applied this test, the Federal Circuit affirmed its holding.

The district court also found that the accused products satisfied the "substantially all" limitation. As a preliminary matter, the district court held that although the construction of the "substantially all" limitation provided specific percentages, the doctrine of equivalents is applicable where the accused value is insubstantially different from the claimed value. The Federal Circuit agreed, stating that the doctrine of equivalents is not foreclosed with respect to claimed ranges. It analogized the facts to those in *Kemin Foods, L.C. v. Pigmentos Vegetales Del Centro S.A. de C.V.*, 464 F.3d 1339 (Fed. Cir. 2006). In that case, the Federal Circuit held that because the patentee did not argue that a concentration of "significantly less than 10%" had a precise upper limit, a reasonable person could determine that a concentration between 6.14 percent and 9.86 percent did not infringe under the doctrine of equivalents. Here, Pozen never stated that "at least 90%, and preferably greater than 95%" should be an absolute floor. The Federal Circuit thus reasoned that under the doctrine of equivalents, a tablet layer with eighty-five percent of the agent could be fairly characterized as an insubstantial change from a layer with ninety percent of the agent.

Like the district court, the Federal Circuit determined that the ANDA products performed the same function in the same way and achieved the same result, satisfying the "substantially all" limitation under the doctrine of equivalents. The Federal Circuit further rejected the appellants' argument that their products did not infringe because they were "admixtures," substances with blended or mixed ingredients, which Pozen disclaimed during prosecution. The Federal Circuit conceded that admixtures had indeed been disclaimed, but it noted that the accused ANDA products are not admixtures because substantially all the agents are separated and segregated into two distinct layers.

Judge Clevenger dissented from the portion of the majority opinion addressing the "substantially all" limitation. He reasoned that in determining whether this limitation is met under the doctrine of equivalents, the question is whether eighty-five percent of naproxen or sumatriptan is equivalent to ninety percent of the same agent. He argued that instead of answering this question, the district court read the limitation "as requiring the tablet to have one more or less pure layer, and not an actual second layer but an 'equivalent' second layer that could be said to be equivalent to a more or less pure layer

even if [the second layer] failed to contain substantially all of the required ingredient.”

I. *RITZ CAMERA & IMAGE, LLC V. SANDISK CORP.*⁹

In *Ritz Camera & Image, LLC v. SanDisk Corp.*, the United States Court of Appeals for the Federal Circuit held that direct purchasers who cannot challenge a patent’s validity or enforceability through a declaratory judgment action may nevertheless bring a so-called *Walker Process* antitrust claim, which seeks to impose liability when a party uses a fraudulently procured patent to obtain or preserve a monopoly. The plaintiff, Ritz Camera & Image LLC (“Ritz”), is a retailer who purchases flash memory products from patent holder SanDisk Corp. (“SanDisk”). In June 2010, Ritz filed a complaint alleging that SanDisk had violated Section 2 of the Sherman Act, 15 U.S.C. § 2, by obtaining a monopoly in the NAND flash memory market through the enforcement of two patents it claims were procured through intentional fraud on the Patent and Trademark Office (“PTO”). Despite the fact that Ritz faces no threat of action for patent infringement, the Federal Circuit held that a direct purchaser of goods covered by a patent has standing to bring a *Walker Process* antitrust claim against a patentee, even if the direct purchaser would not be entitled to seek declaratory relief under the patent laws. In upholding the previous district court’s decision, the court relied on United States Supreme Court precedent in *Walker Process Equipment, Inc. v. Food Machinery & Chemical Corporation*, 382 U.S. 172 (1965).

Ritz filed a complaint in the United States District Court for the Northern District of California, alleging that SanDisk had fraudulently procured two patents central to its flash memory business by failing to disclose known prior art and making affirmative misrepresentations to the PTO. SanDisk filed a motion to dismiss, arguing that Ritz lacked standing to bring a *Walker Process* antitrust claim premised on the invalidity or unenforceability of SanDisk’s patents because (1) Ritz did not encounter any threat of an infringement action and (2) Ritz had no other basis to bring a declaratory judgment action challenging the patents. Next, SanDisk warned that allowing parties such as Ritz to use a *Walker Process* antitrust lawsuit to challenge patents would represent an unwarranted expansion of the *Walker Process* doctrine, leading to an “avalanche of patent challenges.”

The district court refused to grant SanDisk’s motion to dismiss on these grounds. Although the court recognized that *Walker Process* claims are normally brought by competitors of the patentee as counterclaims in patent

9. 700 F.3d 503 (Fed. Cir. 2012).

infringement actions, it also noted that the Supreme Court's decision in *Walker Process* "places no limitation on the class of plaintiffs eligible to bring such claims." The district court further rejected SanDisk's floodgates argument, noting the rarity of *Walker Process* claims and the Supreme Court's own rejection of a similar argument in *Walker Process*. SanDisk petitioned the Federal Circuit for interlocutory review of the district court's ruling.

Upon review, the Federal Circuit agreed with the district court that a direct purchaser may bring a *Walker Process* antitrust claim, even if it would not be entitled to seek declaratory relief against the patentee under the patent laws. Recalling the Supreme Court's decision in *Walker Process*, the court outlined the two conditions that must exist to support a finding of antitrust liability based on the fraudulent procurement of a patent. First, it requires the plaintiff to show that the defendant procured the relevant patent by "knowing and willful fraud on the PTO." Second, the plaintiff must prove all the elements necessary to establish a Sherman Act monopolization charge.

The Federal Circuit explained that the *Walker Process* claim is governed by principles of antitrust law, separate from a patent declaratory judgment action. As such, it rejected SanDisk's contention that "rules governing standing to bring patent validity challenges should be imported into an antitrust case," even though improper procurement of a patent is one of the requisite elements of the claim.

The Federal Circuit relied heavily on the Supreme Court's language in *Walker Process* to support its holding. Rejecting similar arguments as those posed by SanDisk, the Supreme Court in *Walker Process* stated that rules defining which parties may bring suit to invalidate patents should not "dictate the boundaries of antitrust standing." The Court reasoned that, unlike patent invalidity actions, *Walker Process* claims "[do] not directly seek the patent's annulment." Rather, "the gist of the antitrust claim is that since the defendant obtained its patent by fraud it cannot enjoy the limited exception to the prohibitions of § 2 of the Sherman Act." Accordingly, the defendant must answer to "those injured by any monopolistic action taken under the fraudulent patent claim." In *Ritz Camera*, the Federal Circuit clarified that the Supreme Court did not limit that category of potential plaintiffs to only those who have standing to bring an independent action under the patent laws.

The Federal Circuit also rejected SanDisk's argument that granting standing to all direct purchasers bringing *Walker Process* claims would "trigger a flood of litigation and stem innovation." Again, the court cited the Supreme Court to explain that *Walker Process* claims do not pose a substantial threat to the patent regime because they "deal only with a special class of patents, i.e., those procured by intentional fraud."

In refusing to import standing requirements for patent invalidity claims into *Walker Process* claims, the Federal Circuit reaffirmed the Supreme Court's determination that *Walker Process* actions, which arise under antitrust law, are fundamentally distinct from patent validity actions. Although the direct purchaser of a patented good might not have standing to challenge the patent's validity, it nevertheless has standing to bring an antitrust action based on fraudulent procurement of a patent.

J. VOTER VERIFIED, INC. V. PREMIER ELECTION SOLUTIONS, INC.¹⁰

In *Voter Verified, Inc. v. Premier Election Solutions, Inc.*, the United States Court of Appeals for the Federal Circuit held that an online article is a prior art printed publication when “the reference was made ‘sufficiently accessible to the public interested in the art’ before the critical date.” The court also confirmed its earlier holding that a human being cannot constitute a “means” within the scope of 35 U.S.C. § 112, which provides the requirements for a patent specification. Finally, the court held that liability for direct infringement of a method claim requires that one party either performs every step of the claimed method or exerts direction or control over any such steps performed by others.

In 2009, Voter Verified, Inc. (“Voter Verified”) brought one patent infringement action in the Middle District of Florida against Premier Election Solutions, Inc. (“Premier”) and Diebold, Inc. (“Diebold”). It then brought a nearly identical patent infringement action in the same court against Election Systems & Software, Inc. (“Election Systems”). In each action, Voter Verified alleged infringement of claims 1 through 94 of its U.S. Reissue Patent RE40,449 (the “’449 patent”), which claims “automated systems and methods for voting in an election” where a voter’s ballot is printed after voting and checked for accuracy against the voter’s choices. Premier, Diebold, and Elections Systems (collectively “defendants”) “produce and market automated voting systems.” The defendants counterclaimed, seeking declaratory judgment of invalidity on grounds of anticipation, obviousness, and indefiniteness. In both the Premier case and the Election Systems case, the district court ruled on summary judgment that claim 49 was invalid as obvious and that the defendants did not infringe the other claims.

At trial, the defendants presented as prior art an article (the “Benson article”) from the Risks Digest, an online periodical concerning computer safety and security. Voter Verified contended that the web-based reference

10. 698 F.3d 1374 (Fed. Cir. 2012).

must be “searchable by pertinent terms over the internet” to qualify as a prior art “printed publication” and that defendants failed to present evidence of any indexing of a public database that would have allowed the public to find the Risks Digest website or the Benson article therein. Therefore, Voter Verified argued that the Benson article should have been excluded from the prior art. The defendants countered that the Risks Digest website was well known to those interested in the art of voting technologies and that the Risks Digest website provided a searchable index of its articles. In each case, the district court agreed with the defendants, holding that claim 49 was obvious in view of the Benson article and therefore invalid. Voter Verified appealed the court’s finding in both of the cases, arguing that the Benson article did not qualify as prior art because it was only accessible from the Risks Digest website.

Regarding the other claims, the district court found no infringement on the part of the defendants. During claim construction, the trial court construed the “ballot scanning means” in claims 1 through 48 to require a ballot-scanning machine. In defendants’ systems, however, the corresponding step involved manual scanning by the voter. As for method claims 49 through 55 and 85 through 93, each claim required at least one step performed “by the voter.” The court found, however, that even if defendants’ systems required voters to perform steps essentially identical to those in the claimed method, there was no evidence that Voter Verified “exercised the requisite control over voters to directly infringe” the method claims. Thus, the defendants’ systems did not infringe.

Voter Verified appealed each of these decisions. As to claims 1 through 48, Voter Verified argued that the voter is an alternative and equivalent structure for carrying out the ballot scanning function. It further argued, with regard to claims 49 through 55 and 85 through 93, that the defendants’ voting systems controlled the election process such that the computer programs controlled the voter’s actions. The Federal Circuit consolidated the two cases on appeal since they were nearly identical.

The Federal Circuit agreed with the trial judge that the Benson article was prior art and that it rendered claim 49 obvious. The court found that the key question was “whether the reference was made ‘sufficiently accessible to the public interested in the art’ before the critical date.” The public accessibility of a reference is determined on a case-by-case basis and is “a legal conclusion based on underlying factual determinations.” Although indexing is a relevant factor in determining the accessibility of potential prior art, it is not a “necessary condition for a reference to be publicly accessible.” Rather, it is one of many factors to consider. The more relevant question is whether the “persons interested and ordinarily skilled in the subject matter or art[,]

exercising reasonable diligence, can locate it.” In this case, indexing in a commercial search engine was not required, as Risks Digest was well known to the community interested in the risks of computer automation, with over one hundred articles on electronic voting. The article was publicly disclosed on Risks Digest’s website and was searchable through that site.

In addressing Voter Verified’s arguments for infringement, the Federal Circuit again agreed with the trial judge, rejecting each of Voter Verified’s arguments by citing earlier case law. First, the Federal Circuit held, referencing its decision in *Default Proof Credit Card Systems, Inc. v. Home Depot U.S.A., Inc.*, 412 F.3d 1291 (Fed. Cir. 2005), that “a human being cannot constitute a ‘means’” within the scope of 35 U.S.C. §112, and therefore the voter could not carry out the ballot-scanning function required for infringement. Second, the Federal Circuit held, citing *BMC Resources, Inc. v. Paymentech, L.P.*, 498 F.3d 1373 (Fed Cir. 2007), and *Muniauction, Inc. v. Thomson Corp.*, 532 F.3d 1318 (Fed Cir. 2008), that “liability for direct infringement of a method claim requires that one party either performs every step of the claimed method or exerts ‘direction or control’ over any such steps performed by others.” The court rejected Voter Verified’s arguments that the defendants’ systems controlled the voters, noting that at most the systems instructed and provided voters with access to the system.

II. COPYRIGHT DEVELOPMENTS

A. *AM. INST. OF PHYSICS V. SCHWEGMAN LUNDBERG & WOESSNER, P.A.*¹¹

The United States District Court for the District of Minnesota held that a patent firm’s publishing, downloading, storing, and distributing of internal copies of copyrighted articles through email for the purposes of patent prosecution constituted fair use. The court found that the patent firm’s use was noncommercial, did not compete in the market with the copyright holder’s use of the articles, and was only intended to meet the PTO’s prior art requirements.

Plaintiffs American Institute of Physics, John Wiley & Sons, Inc., and Wiley Periodicals, Inc. (collectively, the “Publishers”) asserted a copyright infringement claim against defendant Schwegman, Lundberg & Woesner, P.A. (“Schwegman”), originally for obtaining eighteen scientific journal articles without paying for a license and submitting copies of the articles to the U.S. Patent and Trademark Office (“USPTO”). The Publishers later

11. No. 12-528, 2013 WL 4666330 (D. Minn. Aug. 30, 2013).

amended their complaint, narrowing the focus of their infringement action to Schwegman's internal use of those articles. They alleged that downloading, storing, and distributing copies of the copyrighted articles internally infringed the Publishers' copyrights in those articles. Schwegman argued that its use constituted a non-infringing "fair use."

The court began its analysis by fleshing out the background of patent prosecution. The Patent Act allows the USPTO to grant patents for new, useful, and nonobvious inventions, based on whether there exists "prior art," which are preexisting teachings of the information embodied in the patent application. Patent applicants have a "duty of candor and good faith" to disclose all materials relevant to their patent claims, regardless of whether they help or hurt patentability. The court explained that this duty of disclosure exists in the international community as well.

The court then evaluated the fair use defense. Fair use relies on four factors to exempt otherwise infringing uses of copyrighted material: (1) the purpose and character of the use (for example, whether the use is commercial or nonprofit), (2) the nature of the copyrighted work, (3) the amount or substantiality of the portion used in relation to the copyrighted work as a whole, and (4) the effect of the use on the potential market value of the copyrighted work. Fair use exempts infringing uses of copyrighted material when enforcement might vitiate the purpose of promoting "the Progress of Science and useful Arts."

The court found that the factor concerning "the purpose and character of the use" favored Schwegman. The court agreed with Schwegman that the purpose of its use was noncommercial, since it was "to ultimately comply with the legal requirement to provide prior art to the USPTO." Additionally, there was no "evidence in the record that would allow a reasonable juror to conclude that Schwegman's downloading and internal copying of the Articles served some other purpose." Unlike Schwegman, the Publishers used the journal articles to "inform the scientific community of advancements in scientific research and new scientific discoveries." Although the court did not find Schwegman's use of the Publishers' articles to be "transformative," since the content of the articles remained unchanged, the court cited precedent suggesting that a new evidentiary purpose could make a given use "fair." Supporting its finding in favor of Schwegman under this factor, the court noted that Schwegman's use focused only on the "facts and ideas" of the articles and was "indifferent" to the copyrighted expression itself. Further, the court found that Schwegman did not render its use commercial by charging clients a rate for downloading the articles, since this particular use did not "supersede the Publishers' intended use." Therefore, the first factor weighed in favor of fair use.

The court further found that the effect of Schwegman's use on the market for the Publishers' articles was minimal. The court found that the Publishers failed to present evidence indicating that Schwegman's use significantly altered the normal market for the scientific articles. The lost revenue from patent lawyers who did not pay licensing fees was "not the sort of negative effect on the market that weighs heavily against a finding of fair use." Such a low threshold for this factor, the court held, would "always weigh in favor of the copyright holder and render the analysis of this factor meaningless." The court instead considered Schwegman's use "different than, and not superseding of, the original purpose," implying that the use likely did not compete with the Publishers' market for the copyrighted works.

The court also found in favor of Schwegman for the remaining two factors, ultimately concluding that the weight of the fair use doctrine favored exempting Schwegman's otherwise-infringing use. The court found that the nature of the copyrighted work also weighed in favor of fair use, since the works at issue were less creative and more informational; their mode of expression did not "predominate over the conveyance of the information." Finally, the court held that even though Schwegman copied the entire works, the copying was necessary to the new and different purpose of identifying and providing prior art to the USPTO. Thus, the court found that the factor for the "amount or substantiality of the portion used" weighed in favor of Schwegman.

In balancing the factors, all of which weighed in favor of Schwegman, the court held that Schwegman's internal copying of the Publishers' articles during patent prosecution was a "fair use." The court emphasized that the purpose of the use was to promote the very basis of both copyright and patent law, to "promote the Progress of Science and useful Arts." Therefore, by encouraging complete disclosure of all prior art to assist patent examiners, the use was fair as a matter of law.

B. *COLUMBIA PICTURES INDUSTRIES, INC. V. FUNG*¹²

In *Columbia Pictures Industries, Inc. v. Fung*, the United States Court of Appeals for the Ninth Circuit held that the operator of a collection of peer-to-peer file sharing websites, which actively help users locate copyright-infringing material, may be liable for contributory copyright infringement because he "offered his services with the object of promoting their use for infringement." In this holding, the court relied primarily on the inducement standard enunciated by the United States Supreme Court in *Metro-Goldwyn-*

12. 710 F.3d 1020 (9th Cir. 2013).

Mayer Studios, Inc. v. Grokster, Ltd. (“*Grokster III*”), 545 U.S. 913 (2005). The court also held that the operator of the websites was not eligible for safe harbor protection under the Digital Millennium Copyright Act (“DMCA”), but that certain aspects of an injunction that the district court imposed on the defendant were unduly burdensome.

Several film studios—Columbia Pictures Industries, Inc.; Disney Enterprises, Inc.; Paramount Pictures Corporation; Tristar Pictures, Inc.; Twentieth Century Fox Film Corporation; Universal City Studios, LLLP; Universal City Studios Productions, LLLP; and Warner Bros. Entertainment, Inc. (collectively “Columbia”)—brought action against website operator isoHunt Web Technologies, Inc., and its owner Gary Fung (collectively “Fung”). Columbia alleged that Fung’s websites and services induced third parties to acquire infringing copies of the studios’ copyrighted material using peer-to-peer file sharing technology. The United States District Court for the Central District of California found the defendants liable for contributory copyright infringement and issued an injunction.

Fung appealed on three grounds: (1) that he should not be liable for contributory copyright infringement; (2) that even if he is liable for infringement, he should be eligible for safe harbor protection under the DMCA; and (3) that the injunctions imposed on him were punitive and unduly vague, violating his right to free speech.

On the first element, the Ninth Circuit Court used the “inducement rule,” established by the United States Supreme Court in *Grokster III* to determine whether companies and individuals are secondarily liable for copyright infringement. Under the rule, four elements must exist before a court may find inducement: (1) distribution of a product or device, (2) acts of infringement, (3) the defendant’s object of promoting the product’s use for infringing copyright, and (4) causation.

On the first element relating to the distribution of a product or device, the court disagreed with Fung’s contention that his websites were not a device or product. Relying on two Ninth Circuit cases since *Grokster*, the court concluded that the term “device” covers services available on the Internet. Since Fung’s websites provided such a “service,” Columbia carried its burden on this element.

On the second element, the court found that Columbia was able to prove that acts of infringement existed by providing records of isoHunt users uploading and downloading infringing content. It further showed that a significant percentage of the content associated with Fung’s websites violated copyright laws.

On the third element, the court found that Fung made “clear and affirmative steps” towards his object of promoting his websites’ use for

copyright infringement. Fung himself actively encouraged users to upload torrent files of copyrighted material. For example, he prominently featured on isoHunt's front page a list of "Box Office Movies," asking users to provide these movies for other users to download. He also posted numerous messages on an online forum requesting that users upload torrents for specific copyrighted films, and he provided links to torrents so that other users could download copyrighted material and infringe on copyrights. This communication by Fung himself was "crucial" for the court to establish inducement liability. The court provided two additional pieces of evidence to bolster its conclusion that Fung had acted to cause copyright violations: (1) Fung did not actively develop filtering tools to hide violating torrents in order to reduce the infringing activity that he knew to exist, and (2) he sold advertisements that provided him with revenue for his activities.

On the fourth element of causation, the court opted to conduct a thorough analysis, highlighting the "potential severity of a loose causation theory for inducement liability," since the reach of liability could be enormous in the digital age. It analyzed both Fung's active encouragement of infringement and his distribution of tools to facilitate infringement, including torrent trackers, ultimately concluding that causation existed based on undisputed fact. Because the four requisite elements existed, the court affirmed Fung's liability for inducement of copyright infringement.

Fung next claimed that regardless of whether his actions constituted the inducement of copyright infringement, he was eligible for defenses under three DMCA safe harbor provisions, for which he had the burden of proof. The court disagreed, rejecting each of these defenses. First, the court held that Fung's torrent trackers are not eligible for protection under 17 U.S.C. § 512(a), which applies to "service providers who act only as 'conduits' for the transmission of information." Because the trackers, and not the users, select the points of connection between the users in order to download files, the trackers play a more active role than the "service providers" intended to benefit from this provision.

Under the second provision, 17 U.S.C. § 512(c), which was designed to protect the liability of storage providers, the court held that Fung was not eligible for safe harbor because he had actual knowledge that the torrents stored on his website were tools for copyright infringement. Furthermore, he benefited financially from the infringement. The same reasoning supported the court's finding under the third provision, 17 U.S.C. § 512(d), which protects service providers that unknowingly "link[] users to an online location containing infringing material." Again, Fung was not eligible for safe harbor protection because he was aware of the infringement and received

direct financial benefit. Thus, the court held that Fung could not claim any defense under the safe harbor provisions.

Finally, the court addressed Fung's challenge to the scope of the permanent injunction issued against him by the district court. First, the Ninth Circuit found that several provisions of the injunction were too vague to meet the standards of Rule 65(d) of the Federal Rules of Civil Procedure, which "prefers certainty to flexibility" in requiring that an order granting an injunction "state its terms specifically." The court thus required amendment of these provisions. Second, the court agreed with Fung that certain provisions of the injunction were unduly burdensome because they effectively prohibited him from "seeking legitimate employment." The court held that the district court must limit the prohibitions in these provisions, which prevented Fung from "ever working for any technology company whose services others might use to infringe copyright."

Despite its finding that the permanent injunction was vague and unduly burdensome, the Ninth Circuit affirmed the district court's grant of summary judgment to Columbia, concluding that Fung was liable for contributory copyright infringement under the inducement rule and was not protected under the DMCA safe harbor provisions.

C. *FOX BROADCAST CO. V. DISH NETWORK LLC*¹³

In *Fox Broadcasting Company, Inc. v. Dish Network LLC*, the United States Court of Appeals for the Ninth Circuit held that the district court properly denied a network broadcaster's request for a preliminary injunction for direct and secondary copyright infringement against a satellite television service provider whose set-top box offered digital video-recording and commercial-skipping capabilities.

In 2012, Fox Broadcasting Company, Twentieth Century Fox Film Corp, and Fox Television Holdings, Inc. (collectively, "Fox") brought an action against Dish Network ("Dish") alleging that its set-top box called the "Hopper" featured capabilities that infringed upon Fox's programming copyrights and violated the parties' contract.

In early 2012, Dish introduced two features exclusive to the Hopper: PrimeTime Anytime ("PTAT") and AutoHop. PTAT allows subscribers to set a timer to record primetime programming on any of the four major broadcast networks. AutoHop, generally available the morning after the live broadcast, allows users to automatically skip commercials on shows recorded using PTAT. In order to test AutoHop's functionality, Dish technicians

13. No. 12-57048, 2014 WL 260572 (9th Cir. Jan. 24, 2014).

create quality assurance copies of Fox's nightly primetime programming to ensure that the commercials have been accurately marked. Fox owns the copyrights to certain television shows that Fox airs on its network. In response to Dish's introduction of PTAT and AutoHop, Fox brought an action alleging direct copyright infringement, secondary copyright infringement, and breach of contract.

A United States District Court for the Central District of California found that Dish's quality assurance copies of Fox's primetime programming likely breached a provision of the parties' contract prohibiting "reproduction," but the court nonetheless denied a preliminary injunction. To obtain a preliminary injunction, Fox would have needed to show that "(1) it is likely to succeed on the merits, (2) it is likely to suffer irreparable harm in the absence of preliminary relief, (3) the balance of equities tips in its favor, and (4) an injunction is in the public interest." Although Dish likely breached its contract and directly infringed Fox's reproduction rights by creating the quality assurance copies, the district court held that Fox was not entitled to an injunction because the broadcaster failed to show that it suffered irreparable harm as a result of the quality assurance copies.

The Ninth Circuit affirmed the lower court's finding that PTAT did not render Dish liable for direct infringement of Fox's copyright. In order to establish a claim of copyright infringement by reproduction, Fox needed to demonstrate ownership of the copyright, as well as copying by Dish. The court explained that Fox successfully demonstrated its ownership of the copyrights but failed to demonstrate that Dish was responsible for the copies. The court held that the user was "the most significant and important cause of the copy." Although Dish determined the parameters of what would be included in the primetime block, decided how long copies would remain available for viewing, and prevented users from stopping a recording once it had begun, the Ninth Circuit affirmed that Dish was not directly liable for copyright infringement because PTAT copies were made in response to users' commands.

The Ninth Circuit also rejected Fox's argument that Dish was liable for secondary copyright infringement for facilitating its customers' creation of infringing copies. In order to establish secondary liability, Fox first had to establish that Dish's customers infringed upon Fox's copyright. Relying on the Supreme Court's analysis in *Sony Corp. of America v. Universal City Studios, Inc.*, 464 U.S. 417 (1984), the Ninth Circuit determined that the customers' reproductions constituted a legitimate fair use for time-shifting purposes. The court concluded that it was immaterial to Fox's copyright interests whether or not Dish customers skipped commercials because Fox only owns

the copyrights for the television shows, not for the advertisements aired during commercial breaks.

In its review of the district court's analysis of whether Dish users' copies constituted a fair use, the Ninth Circuit considered the fair use factors outlined in 17 U.S.C. § 107. Of primary importance was the "effect of the use upon the potential market for or value of the copyrighted work." Since the customers' copies are for noncommercial purposes, Fox had to demonstrate that the potential market for its copyrighted programs would be adversely affected if the practice of recording copies without commercials became widespread. The court, however, found that Fox's market concerns stemmed primarily from the commercial-skipping function, rather than the recording function. For instance, Fox does not charge providers an additional licensing fee to offer Fox's licensed video on demand, so long as the providers disable fast-forwarding capabilities. Therefore, the Ninth Circuit determined that any possible market harm would result from the commercial-skipping function, not from Dish customers' copies. Since Fox does not own the copyrights to the commercials, the Ninth Circuit found that any market harm resulting from a commercial-skipping function does not implicate Fox's copyright interest.

Thus, the Ninth Circuit, applying a very deferential standard of review, concluded that the district court properly denied Fox's request for a preliminary injunction based on Dish's alleged contractual breaches and copyright infringement.

D. *LUVDARTS, LLC V. AT&T MOBILITY, LLC*¹⁴

In *Luvdarts, LLC v. AT&T Mobility, LLC*, the United States Court of Appeals for the Ninth Circuit affirmed a U.S. district court's holding that mobile messaging content developers failed to state a claim for copyright infringement against mobile wireless carriers based on users' unauthorized sharing of copyrighted content over messaging networks. The United States District Court for the Central District of California and the Ninth Circuit agreed that plaintiffs did not sufficiently allege infringement under a theory of either vicarious or contributory copyright liability.

Luvdarts, LLC and Davis-Reuss, Inc. (collectively, "Luvdarts") produces, publishes, distributes, and sells mobile multimedia-messaging content, including greeting card-style messages and games. The defendants, AT&T Mobility, LLC, CellCo Partnership, Sprint Spectrum LP, T-Mobile USA, Inc., and Verizon Wireless Telecom, Inc. (collectively, "Carriers"), are mobile

14. 710 F.3d 1068 (9th Cir. 2013).

wireless carriers that own Multimedia Messaging Service (“MMS”) networks. MMS networks provide a platform for sending and receiving messages with multimedia content.

Luvdarts’s content is distributed over the defendants’ MMS networks via mobile devices, and most of its business involves selling greeting cards to users who can forward them to friends. Although Luvdarts notifies users and recipients that the content may be shared only once, there is no technical impediment to a recipient forwarding a purchased message to others. Luvdarts alleged that many content recipients ignored the notice and reshared the content without permission or compensation, thereby infringing Luvdarts’s copyrights. After discovering the infringement, Luvdarts contacted the Carriers, demanding accountability and listing each of its copyrighted titles. The Carriers, however, failed to take any meaningful remedial action.

In 2011, Luvdarts brought an action in the Central District of California against the Carriers for vicarious or contributory copyright infringement, based on the conduct of users in their mobile messaging networks. It also claimed that the Carriers violated California’s unfair competition laws. The Carriers filed a motion to dismiss for failure to state a claim upon which relief can be granted. After Luvdarts waived the state law claim, the district court granted the Carriers’ motion, dismissing with prejudice the remaining copyright infringement claims. Luvdarts appealed.

Luvdarts’s principal argument was that the Carriers were liable for the infringement committed over their networks under a theory of either vicarious or contributory copyright liability. As the Supreme Court has held, the Copyright Act does not explicitly render a third person liable for another person’s infringement. Vicarious infringement occurs when one profits from direct infringement while declining to exercise a right to stop or limit it; contributory infringement liability exists when a party has “induced or encouraged” direct infringement. The Ninth Circuit concluded that given Luvdarts’s allegations, liability against the Carriers did not lie under either theory.

Under the vicarious infringement claim, the Ninth Circuit held that Luvdarts failed to adequately allege that the Carriers had the necessary right and ability to supervise the infringing conduct. Luvdarts conceded that the carriers currently have no way of supervising their networks for copyright infringement, but it alleged that they had the ability to implement a system for this purpose. The Ninth Circuit rejected this argument, concluding that an allegation of a “capacity to supervise” is an inadequate substitute for the “ability to supervise.” Without meeting this first element for vicarious

liability, the Ninth Circuit held that Luvdarts could not prevail on its vicarious copyright infringement claim.

The Ninth Circuit further held that Luvdarts's claim for contributory liability was unsuccessful. The court explained that a defendant is contributorily liable if the defendant both (1) knew of the direct infringement and (2) either induced, caused, or materially contributed to the infringing conduct. The Ninth Circuit rejected Luvdarts's argument that its notices were sufficient to inform the Carriers of their users' copyright infringement, since the notices were vague and did not identify which titles were infringed, who infringed them, or when the infringement occurred. The Ninth Circuit observed that in order to invoke the protections of the Digital Millennium Copyright Act, 17 U.S.C. § 512, Luvdarts was required to provide information reasonably sufficient to assist the Carriers in locating the infringing material.

The Ninth Circuit also rejected Luvdarts's argument that the Carriers were willfully blind to their users' infringing conduct, another circumstance that might impose contributory liability for copyright infringement. As a preliminary matter, the court held that Luvdarts failed to establish knowledge of direct infringement. Further, the court held that Luvdarts failed to allege that the Carriers subjectively believed that infringement was likely occurring on their networks and nevertheless took deliberate actions to avoid learning about the infringement. The Ninth Circuit concluded that Luvdarts's allegations fell far short of alleging these essential elements of willful blindness.

This case shows that a party bringing a copyright action must clearly plead claims of contributory or vicarious copyright infringement to survive a motion to dismiss. The Ninth Circuit's decision, however, leaves open the question of whether a future plaintiff might successfully state a claim for vicarious or contributory copyright infringement against mobile wireless carriers based on the unauthorized sharing of content by third-party mobile device users on the MMS platform.

E. *METROPOLITAN REGIONAL INFORMATION SYSTEMS, INC. V. AMERICAN HOME REALTY NETWORK, INC.*¹⁵

In *Metropolitan Regional Information Systems, Inc. v. American Home Realty Network, Inc.*, the United States Court of Appeals for the Fourth Circuit held that the author of a compilation of related works, such as an automated database, registers copyright interest in the individual components of the

15. 722 F.3d 591 (4th Cir. 2013).

compilation when he obtains a copyright registration for the compilation. The owner of the copyright in the compilation, therefore, does not have to list the name and author of each individual component work in the compilation at the time of registration. The court also held that the E-SIGN Act, 15 U.S.C. § 7001, allows an electronic transfer of copyright to satisfy 17 U.S.C. § 204's writing and signature requirements. Specifically, the court held that "clicking yes" in response to an electronic Terms of Use may constitute a valid transfer of copyright.

Metropolitan Regional Information Systems, Inc. ("MRIS") operates an online database that compiles property listings for real estate brokers and subscribers. Subscribers click "yes" to assent to MRIS's Terms of Use ("TOU") before uploading their real estate listings, and by doing so they agree to assign to MRIS the exclusive copyrights in each photograph in those listings. American Home Realty Network, Inc. ("AHRN") operates an online real estate search engine and referral business, which collects and displays data from the MRIS database, among other sources. In 2011, MRIS sent AHRN a cease-and-desist letter. When the parties failed to settle on appropriate licensing terms, MRIS filed suit against AHRN, alleging copyright infringement. The United States District Court for the District of Maryland granted MRIS's motion for a preliminary injunction barring AHRN's use of photographs from MRIS's database. AHRN appealed, arguing that MRIS's registration of its database did not constitute proper registration of copyright interest in the database's individual photographs, a prerequisite for filing an infringement suit. AHRN also claimed that MRIS did not own copyright in the individual photographs because the subscribers' electronic agreement did not transfer copyright to MRIS.

In determining whether MRIS had a valid claim of copyright infringement, the Fourth Circuit first addressed whether MRIS registered its copyright interest in the individual photographs. Although the Copyright Act establishes a default presumption in 17 U.S.C. § 201(c) that the owner of a collective work does not own the copyrights in the individual component parts, that presumption does not apply if, as MRIS asserted, there was "an express transfer of the copyright" in the components. Section 409, which governs applications to register compilations, is ambiguous on the issue of whether a compilation's author who has registered the compilation and acquired copyright in the individual components has also registered copyright in those individual components. However, citing § 409's purpose of "encouraging prompt copyright registration," and § 408's goal of "easing the burden on group registrations" by allowing a single registration for a group of related works (for categories that include automated databases), the court

concluded that MRIS registered its interest in the individual photographs when it registered the automated database.

The court then turned to the question of whether MRIS's electronic subscriber agreement is an assignment of rights under § 204 of the Copyright Act, which requires that transfers of copyright be "in writing and signed by the owner of the rights conveyed." The court initially noted the "anomaly" of allowing AHRN, a third party, to invoke § 204 for its own benefit in a situation in which there was no dispute between the copyright assignor and assignee. However, although there was no dispute between MRIS and its subscribers over copyright ownership, MRIS failed to raise this point, so the court proceeded to analyze the electronic assignment issue. The court explained that under the E-Sign Act, "a signature may not be denied legal effect simply because it is in electronic form." The E-Sign Act explicitly lists several exceptions to this mandate, but agreements to transfer copyright ownership are not included in that list. The court treated this omission as a clear legislative intent that the E-Sign Act should apply to § 204 of the Copyright Act. In light of that intent, as well as the fact that other courts have found the E-Sign Act applicable to analogous statutory signature requirements, the court held that electronic agreements constitute valid transfers of copyright interests under § 204.

Since MRIS did not fail to register copyright interest in the individual photographs, and since its electronic subscriber agreement did transfer copyrights in the photographs to MRIS, the court affirmed the district court's decision to grant MRIS's motion for an injunction.

F. *MONGE V. MAYA MAGAZINES, INC.*¹⁶

In *Monge v. Maya Magazines, Inc.*, a divided panel of the United States Court of Appeals for the Ninth Circuit held that the unauthorized publication of plaintiffs' secret wedding photographs did not constitute fair use under 17 U.S.C. § 107 of the Copyright Act. In doing so, the Ninth Circuit reversed the district court's decision granting summary judgment for the defendant.

Noelia Monge, a pop singer, and Jorge Reynoso, Monge's manager and a music producer, brought a copyright infringement action against Maya Magazines, Inc. ("Maya") for publishing the couple's unpublished secret wedding pictures in *TVNotas*, a Spanish-language celebrity gossip magazine. The district court granted summary judgment for the defendant based on an affirmative defense of fair use under § 107. The couple appealed the decision.

16. 688 F.3d 1164 (9th Cir. 2012).

In determining whether the district court properly applied the fair use doctrine, the Ninth Circuit applied the four non-exclusive statutory factors enumerated in § 107:

1. [T]he purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes;
2. the nature of the copyrighted work;
3. the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and
4. the effect of the use upon the potential market for or value of the copyrighted work.

The panel majority held that none of the four fair use factors supported Maya's fair use claim. As to the first factor, the Ninth Circuit found that the purpose and character of Maya's use was for a commercial publication and was minimally transformative. The Ninth Circuit therefore found that the first factor weighed against fair use, even though the wedding coverage qualified as news reporting.

In assessing the nature of the copyrighted work under the second factor, the Ninth Circuit observed that even though the published photos were not highly artistic in nature, the pictures were unpublished until the defendant published them in its magazine. The plaintiffs had the right to control the first publication of the pictures, and "under ordinary circumstances [this right would] outweigh a claim of fair use." The Ninth Circuit did not find any extraordinary circumstances that justified the publication of the unpublished pictures. Therefore, the second factor also did not favor the defendant. In its analysis, the Ninth Circuit refused to address the unpublished status of the pictures under privacy law.

The Ninth Circuit looked at the quantitative and qualitative aspects in determining the third factor. Although the files in the storage device sold to Maya included over four hundred images and videos, and Maya published only six pictures on the device, the court noted that these were all of the wedding pictures on the device and almost every wedding night photo the couple had. The Ninth Circuit also found that there was only "minimal cropping," and Maya published the "heart" of each of the copyrighted photographs. The court ruled that Maya's use was "total," and this third factor accordingly weighed against fair use.

As to the fourth factor, the Ninth Circuit held that there was a potential market for the photos regardless of whether the couple intended to sell the publication rights to the pictures. This final factor did not favor the

defendant's claim of fair use. The Ninth Circuit also recognized that the demand for the pictures significantly declined because of Maya's publication of the photos.

Upon balancing the factors, the Ninth Circuit found that all four factors tipped against Maya's claim of fair use. Accordingly, Maya failed to meet its burden to establish an affirmative defense. The holding of the Ninth Circuit reminds newsrooms that newsworthiness alone is not sufficient to make the unauthorized use of copyrighted materials fair.

G. *SELTZER V. GREEN DAY, INC.*¹⁷

In *Seltzer v. Green Day, Inc.*, the United States Court of Appeals for the Ninth Circuit held that the unauthorized use of a drawing in a four-minute video clip designed for the backdrop of a rock concert is fair use within the meaning of 17 U.S.C. § 107.

In 2003, Derek Seltzer, an artist and illustrator, created Scream Icon, a drawing of a screaming, contorted face. Five years later, Roger Staub ("Staub"), a photographer and professional lighting and video designer, viewed Seltzer's Scream Icon drawing on a poster on a brick wall in Los Angeles and photographed it. The following year, the famous rock band Green Day hired Performance Environmental Design ("PED") to create lighting, pyrotechnic effects, and video backdrops for a new concert tour featuring music from its latest album, *21st Century Breakdown*. PED subsequently arranged for Roger Staub to create Green Day's video backdrops. For one song, Staub created a four-minute video that included a modified version of his photograph of the Scream Icon poster on the brick wall. When preparing the video, Staub made the following modifications to his photograph: he cut out the Scream Icon image, superimposed a red cross onto the photograph, and changed the contrast and color.

Seltzer brought an action against Green Day, Inc., Green Day Touring, Green Day, Billie Joe Armstrong, Frank Edwin Wright III, Michael Ryan Pritchard, Warner Bros. Records, Inc., Infect Productions, Roger Staub, and Performance Environmental Design (collectively, "Green Day") in the United States District Court for the Central District of California for copyright infringement. Seltzer alleged that Green Day's unauthorized use of his Scream Icon illustration in the video backdrop for Green Day's concert infringed his copyright.

The district court granted summary judgment for Green Day on Seltzer's copyright infringement allegation, holding that Green Day's use of the

17. 725 F.3d 1170 (9th Cir. 2013).

copyrighted image was fair use. The court furthermore awarded Green Day full attorneys' fees under 17 U.S.C. § 505, finding that Seltzer's claims had been objectively unreasonable. Seltzer appealed both the grant of summary judgment and the grant of attorneys' fees.

The Ninth Circuit affirmed the district court's infringement ruling, holding that Green Day's use of Seltzer's illustration constituted a fair use under the four-factor test outlined in 17 U.S.C. § 107. The first factor looks to "the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes." In general, a finding that the use was "transformative" will favor the defendant. In *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569 (1994), the United States Supreme Court stated that one work transforms another when "the new work . . . adds something new, with a further purpose or different character, altering the first with new expression, meaning or message." The Ninth Circuit elaborated that a work is transformative when "new expressive content or message is apparent," even when the work makes few physical changes to the original or fails to comment on the original.

According to the Ninth Circuit, Green Day's use of Scream Icon was transformative. Green Day used the original as raw material in the construction of the four-minute video backdrop. Also, the message and meaning of the original Scream Icon is different. Green Day's use of Scream Icon was only incidentally commercial; the band never used it to market the concert, CDs, or merchandise. Therefore, the first fair use factor weighed in Green Day's favor.

The second factor looks at "the nature of the copyrighted work." Scream Icon was a creative and widely disseminated work, both on the Internet and on the streets of Los Angeles before Green Day used it in their concerts. Accordingly, Seltzer controlled the "first public appearance" of his work. This factor weighs only slightly in Seltzer's favor.

III. TRADEMARK DEVELOPMENTS

A. *1-800 CONTACTS, INC. V. LENS.COM, INC.*¹⁸

In *1-800 Contacts, Inc. v. Lens.com, Inc.*, the United States Court of Appeals for the Tenth Circuit held that purchasing keywords closely resembling a competitor's service mark for internet-search advertisements is not direct infringement if the resulting consumer-confusion rate falls below ten percent. The court further held that an internet company is only vicariously liable for

18. 722 F.3d 1229 (10th Cir. 2013).

the infringing conduct of its marketing affiliates if it grants them authority or ratifies their decisions. At the same time, however, the court suggested that an internet company may be liable for contributory infringement if it fails to reign in marketing affiliates from directly infringing on a competitor's service mark.

Internet search engines are providing advertisers with unprecedented opportunities to target consumers. Google's AdWords, for example, allows companies and marketers to purchase keywords so that their advertisements will appear whenever users conduct a search using that particular term. Courts must now consider how the Lanham Act's protections against trademark and service-mark infringement apply in this context. More particularly, they must address whether an advertiser's use of keywords closely resembling a competitor's service mark violates the Lanham Act.

In the summer of 2005, 1-800 Contacts learned that a Google search for its registered service mark, "1800 CONTACTS," returned paid advertisements for Lens.com, one of its competitors in the online marketplace for contact lenses. 1-800 Contacts understood that these search results were only possible if Lens.com or its affiliate marketers bid on that exact term or similar search terms or phrases when using Google's AdWords to place advertisements.

In August 2007, 1-800 Contacts sued Lens.com for infringing upon its service mark in search-engine advertisements. During discovery, the court learned that Lens.com bid on nine keywords that closely resembled 1-800 Contacts' mark, such as "800 contact lenses" and "800conyacts.com." The court also learned that two affiliate marketers bid on 1-800 Contacts' mark as a keyword and used it in their advertisements. These facts pushed 1-800 Contacts to further allege that Lens.com carried secondary liability for its affiliate marketers' misconduct.

Ultimately, however, the United States District Court for the District of Utah granted summary judgment in favor of Lens.com, finding that 1-800 Contacts failed to show compelling evidence of consumer confusion and secondary liability. 1-800 Contacts then appealed the district court's judgment in the United States Court of Appeals for the Tenth Circuit.

To determine whether Lens.com confused consumers and directly committed service-mark infringement, the appeals court considered six factors: (1) similarities between the marks; (2) the defendant's intent to adopt the mark; (3) evidence of actual consumer confusion; (4) the relationship between how the parties market their goods; (5) how much consumers care about the mark in making a purchase; and (6) the mark's strength.

The court concluded that 1-800 Contacts did not have sufficient evidence showing that Lens.com's keyword purchases constituted direct service-mark

infringement. The court noted that Lens.com's advertisements came up 1,626 times in consumers' search results, yet they received only twenty-five clicks. It therefore concluded that initial-interest confusion—whereby consumers were lured away from 1-800 Contacts' website—occurred no more than 1.5 percent of the time, far below the 1 percent minimum for establishing direct infringement.

Meanwhile, to determine whether to impose secondary liability on Lens.com for its marketing affiliates' conduct, the court examined the principles of vicarious liability and contributory infringement. A principal has vicarious liability when its agent's direct infringement "is within the scope of the agent's actual authority or ratified by the principal." Contributory infringement, by contrast, arises when the principal knowingly abets infringement.

The court concluded that Lens.com was not vicariously liable for their marketing affiliates' conduct. Testimony from an affiliate who used a variation of 1-800 Contacts' service mark in the text of an advertisement suggested to the court that Lens.com did not grant him authorization. Without evidence of Lens.com authorizing such conduct, 1-800 Contacts could not establish vicarious liability. Likewise, because advertisements generated from affiliates' purchased keywords garnered even fewer clicks than those from Lens.com, the court reasoned that they had not directly infringed on 1-800 Contacts' mark. This conclusion made it impossible to hold Lens.com vicariously liable.

Nonetheless, the court found that there was enough evidence for a jury to consider whether Lens.com committed contributory infringement. In the court's view, Lens.com could have addressed some of 1-800 Contacts' complaints of direct infringement through an e-mail blast demanding marketing affiliates to respect its competitor's mark in its advertisements.

The Tenth Circuit affirmed most of the district court's findings on summary judgment, holding that a 1.5 percent consumer-confusion rate was not enough to constitute direct infringement in search-engine advertisements. Furthermore, the court concluded that Lens.com was not vicariously liable for its marketing affiliates' behavior. On the question of whether Lens.com committed contributory infringement, however, the Tenth Circuit reversed and remanded the case to the district court.

B. *MULTI TIME MACHINE, INC. V. AMAZON.COM*¹⁹

In *Multi Time Machine, Inc. v. Amazon.com*, the United States District Court for the Central District of California held that there is no trademark infringement when displaying a competitor's products in response to a trademark name search, so long as there is no likelihood of confusion as to the source of the product displayed. In finding no likelihood of confusion, the court applied a subset of the full "likelihood of confusion" factors, following the Ninth Circuit's reasoning in a similar Internet advertising case, *Network Automation, Inc. v. Advanced Systems Concepts, Inc.*, 638 F.3d 1137 (9th Cir. 2011).

Multi Time Machine, Inc. ("MTM") brought a trademark infringement claim under the Lanham Act against Amazon.com, Inc. and Amazon Services LLC (collectively "Amazon"). MTM sells military-style watches under the brands "MTM Special Ops" and "MTM Military Ops" through a limited set of authorized websites, not including Amazon.com. Amazon is an online retailer that sells large volumes of products directly to consumers. Amazon uses a search function that responds to consumer searches by displaying products that consumers are likely to be interested in purchasing. Amazon's search algorithm uses not just the words entered by the consumer, but also the consumer's behavior. The effect of this algorithm is that Amazon displays some results that do not include the search term. When Amazon displays results, it shows a product listing for each product, consisting primarily of an image and a title. Since MTM products are not sold on Amazon, when a consumer searches for MTM brands, Amazon instead displays competitors' products. To purchase a product, the consumer must first click on the listing to go to the product detail page, where additional images, brand information, and other details are displayed.

MTM argued that Amazon was infringing its trademark because there was a likelihood of confusion in the search results. MTM maintained that Amazon must tell consumers that Amazon does not carry MTM products before offering competitive products. Amazon countered that it only needed to label the search results clearly as different brands to avoid confusion. Amazon moved for summary judgment, and the primary issue before the court was "whether shoppers on Amazon are confused as to the source of products displayed in the list of search results."

The court started by discussing the conventional eight factors for determining likelihood of confusion as set out in *AMF, Inc. v. Sleekcraft Boats*,

19. 926 F. Supp. 2d 1130 (C.D. Cal. 2013).

599 F.2d 341 (9th Cir. 1979). It noted, however, that “emerging technologies require a flexible approach.” For initial interest confusion, the owner of the mark must demonstrate likelihood of confusion, not mere diversion. The court further found that this case was analogous to *Network Automation* in that both cases involved internet advertising. It therefore followed the *Network Automation* court’s approach by focusing on a subset of four *Sleekcraft* factors: “(1) the strength of the mark; (2) the evidence of actual confusion; (3) the type of goods and degree of care likely to be exercised by the purchaser; [and] (4) the labeling and appearance of the advertisements in the surrounding context on the screen displaying the results page.”

The court split the first factor, the strength of the mark, into conceptual strength and commercial strength. Regarding the conceptual strength of the mark, the court found that the term “Special Ops” was merely a suggestive reference to military-type watches, and that the overall mark is “at best suggestive, and more likely descriptive,” favoring Amazon. It further found that neither side presented admissible evidence as to the mark’s commercial strength and consequently found that the “strength of the mark” factor favored Amazon overall.

In analyzing the second factor, evidence of actual confusion, the court noted the rarity of this case, given that Amazon presented evidence that there was no actual confusion, not merely that confusion was unlikely. Amazon presented statistical evidence that an Amazon consumer searching for an MTM competitor brand sold on its site was twenty-one times more likely to purchase the product than an Amazon consumer searching for an MTM brand who saw competitor brands in the search results. The court disregarded MTM’s unsupported anecdotal evidence of confusion and found Amazon’s evidence of substantial difference in behavior on search results pages to be compelling evidence of no actual confusion, favoring Amazon.

The court quickly covered the third factor, the degree of care likely to be exercised. Because of the high prices associated with the MTM watches—in the hundreds to thousands of dollars—and the increased degree of care that customers use in internet purchases generally, he concluded that Amazon’s consumers would use a high degree of care in making the purchases, favoring Amazon again.

Finally, in analyzing the fourth factor, the court first looked for confusion as to why a query for “mtm special ops” would return results without any MTM brands and found that MTM presented evidence supporting consumer confusion. Nevertheless, when looking for evidence of consumer confusion as to the source of the watches presented on the search results page, the court found that MTM presented no evidence that consumers are likely to be confused as to the source of the results. Without

any evidence of confusion regarding the labeling in this context, this factor favored Amazon yet again.

Since all four likelihood of confusion factors favored Amazon, the court granted Amazon summary judgment, dismissing MTM's trademark infringement suit against Amazon.

IV. TRADE SECRET DEVELOPMENTS

A. *UNITED STATES V. AGRAWAL*²⁰

In *United States v. Agrawal*, the United States Court of Appeal for the Second Circuit affirmed Samarth Agrawal's criminal convictions for violating both the National Stolen Property Act ("NSPA") and the Economic Espionage Act ("EEA") after he misappropriated high-frequency securities trading code from the French bank Société Générale ("SocGen").

The NSPA is a federal criminal statute that prohibits the transportation in interstate or foreign commerce of "goods, wares, merchandise, securities or money" known to have been stolen. The EEA is a federal criminal statute that prohibits a wide range of espionage acts. Under the EEA, a violation occurs when an individual, "with intent to convert a trade secret, that is related to or included in a product that is produced for or placed in interstate or foreign commerce, to the economic benefit of anyone other than the owner thereof, and intending or knowing that the offense will, injure any owner of that trade secret, knowingly . . . without authorization . . . transmits . . . or conveys such information."

While employed by SocGen as a trader, Agrawal actively pursued outside job opportunities, including an opportunity at Tower Research Capital ("Tower"), a New York-based hedge fund. He told Tower he could help build them a software system that was "very similar" to SocGen's, which was composed of highly complicated computer code developed over several years at a cost of several million dollars. After his meeting with Tower, Agrawal acquired access to SocGen's confidential code and printed out more than a thousand pages of it. He then transported the printed pages to his apartment. He met again with Tower to discuss replicating SocGen's strategies, after which Tower offered to hire Agrawal. Agrawal accepted the employment, but he delayed disclosing this to SocGen for several months to gain more experience with SocGen's systems and to collect a monetary bonus from SocGen. During that time, SocGen mistakenly gave Agrawal access to more pages of code, which he printed and took home. Soon thereafter, Agrawal

20. 726 F.3d 235 (2d Cir. 2013).

was arrested and charged with violations of the NSPA and the EEA. After a jury trial, the district court found Agrawal guilty of both charges. Agrawal appealed the convictions to the Second Circuit.

Agrawal challenged the legal sufficiency of both charges in the indictment in light of *United States v. Aleynikov*, 676 F.3d 71 (2d Cir. 2012), in which the Second Circuit held that (1) the NSPA does not cover theft of intangible property and (2) the EEA does not prohibit misappropriation of trade secrets unless the secret was designed to enter or pass in commerce. As to the count involving his alleged violation of the EEA, Agrawal argued that SocGen's computer code was "included in" SocGen's trading systems and that those internal, confidential systems cannot qualify as "product[s] . . . produced for or placed in interstate or foreign commerce," as required by the statute. As to the count involving his alleged violation of the NSPA, Agrawal asserted that SocGen's computer code is intangible property and not "goods, wares, or merchandise," as required by the NSPA. The Second Circuit rejected both of Agrawal's arguments.

Regarding the EEA charge, the Second Circuit distinguished *Aleynikov*, explaining that SocGen's confidential code was not "the 'product' relied on to satisfy the crime's jurisdictional element" under the EEA as it was in *Aleynikov*. Rather, the court explained, "the relevant product was the publicly traded securities bought and sold by SocGen using its HFT systems." As a result, the nexus provisions of the EEA must be read to indicate that, for purposes of determining theft, a trade secret may relate to a product placed in interstate commerce without being included in that product.

In considering the NSPA charge, the court noted that its *Aleynikov* decision overturned a conviction under the NSPA simply because the defendant stole his employer's property in electronic form. The court pointed out, however, that the *Aleynikov* decision did not discuss whether the court would have overturned the conviction if the defendant had stolen property in physical form. After addressing this issue, the court in *Agrawal* held that the NSPA's "tangible goods requirement" is satisfied if the medium of stolen goods is physical paper.

In dissent, Judge Pooler found the majority's discussion of the EEA puzzling given the Second Circuit's decision in *Aleynikov*. She criticized the majority's analysis regarding the nexus between the trade secret and securities product, finding that the trade secret was not related to the securities.

V. PRIVACY DEVELOPMENTS

A. *FLORIDA V. JARDINES*²¹

In *Florida v. Jardines*, the United States Supreme Court held that the use of a drug-sniffing dog on a homeowner's porch to investigate the contents of the home is a "search" within the meaning of the Fourth Amendment.

In 2006, Detective Pedraja of the Miami-Dade Police Department received a tip that marijuana was being grown in the home of Joelis Jardines. Pedraja watched the home for fifteen minutes and then advanced toward the house with Detective Bartelt, a canine handler, and his drug-sniffing dog Franky. As the dog approached the front porch, it detected one of the odors it was trained to detect and "alerted" its handler to the odor's strong point—the front door. Pedraja subsequently obtained a warrant to search the house, which revealed marijuana plants and led to Jardines's arrest. Following charges of marijuana trafficking, Jardines moved to suppress the evidence obtained pursuant to the search warrant.

The trial court granted Jardines's motion, the Florida Third District Court of Appeal reversed, and the Florida Supreme Court quashed the decision of the appellate court. The Supreme Court granted certiorari, and Justice Scalia delivered the opinion of the Court, which was split 5-4.

Writing for the majority, Justice Scalia regarded "the area 'immediately surrounding and associated with the home' . . . as 'part of the home itself for Fourth Amendment purposes.'" He emphasized that private property—particularly the home—is strongly protected, and intrusions are permitted only insofar as they comport with custom. Justice Scalia also pointed out that an individual does not need heightened legal knowledge to comply with the customary "implicit license" to approach a home, and that doing so is "generally managed without incident by the Nation's Girl Scouts and trick-or-treaters." This custom typically "permits the visitor to approach the home by the front path, knock promptly, wait briefly to be received, and then (absent invitation to linger longer) leave." However, he reasoned that using a drug-sniffing dog "to explore the area around the home in hopes of discovering incriminating evidence" violates these expectations, since the scope of this license "is limited not only to a particular area but also to a specific purpose." Justice Scalia found that the detectives' behavior objectively revealed a purpose to conduct a search, which exceeded the scope of their license.

21. 133 S. Ct. 1409 (2013).

Although the plurality held for *Jardines* on a property-based understanding of the Fourth Amendment, Justice Kagan's concurring opinion relied heavily on an invasion of privacy rubric. The concurring opinion considered the defendant's home an "intimate and familiar space" and thus viewed the search as a violation of the defendant's reasonable expectation of privacy. Justice Kagan reasoned that *Kyllo v. United States*, 533 U.S. 27 (2001), resolved the case on privacy grounds. In *Kyllo*, the Court held "that police officers conducted a search when they used a thermal-imaging device to detect heat emanating from a private home," even though the officers did not physically trespass. This analysis, Kagan concluded, prohibits the use of a trained drug-detection dog to "explore details of the home" because a trained drug-detection dog is a "device" similar to a thermal-imaging device. Like the technology in *Kyllo*, the drug-detection dog would allow detection of that which "would not otherwise have [been] discovered without entering the premises."

The dissent, however, concluded that no search within the meaning of the Fourth Amendment took place. Justice Alito reasoned that Detective Bartelt did not commit trespass during an "otherwise lawful visit to the front door" with his dog because the law of trespass does not prohibit police officers from approaching a residence to gather evidence against its occupant. Moreover, despite the frequent and historical use of police dogs for their heightened sense of smell, no precedent has been established that considers use of a dog's sense of smell as a trespass when exercised in an otherwise lawfully approachable area. The dissent also asserted that "the occupant of a house has no reasonable expectation of privacy with respect to odors that can be smelled by human beings who are standing in such places," and a line should not be drawn between odors "smelled by humans and those . . . detectible only by dogs."

In its plurality opinion, the Court concluded that the search took place in a constitutionally protected area, and the officers' ability to gather information in that area was limited. Police officers without a warrant do not have access to private property any more than private citizens. Furthermore, the American conception of property is strongly protected and the officers were not authorized by *Jardines* to enter his property for the purpose of a search. As such, the officers' use of a trained drug-detection dog to explore details of a home that would have been unknowable without physical intrusion was a search in violation of the Fourth Amendment.

B. *MARYLAND V. KING*²²

In *Maryland v. King*, the United States Supreme Court held that a criminal suspect, lawfully arrested for a serious offense supported by probable cause, is not subject to an unreasonable search and seizure when a sample of his DNA is collected and analyzed pursuant to the Maryland DNA Collection Act.

Maryland's DNA Collection Act (the "DNA Act") authorizes law enforcement officers to collect DNA samples from charged or convicted felons of a crime of violence. A sample may not, however, be added to a database before an individual is arraigned, and it must be destroyed if he is not convicted. Furthermore, only identity information may be added to the database.

On April 10, 2009, police arrested Alonzo King on first- and second-degree assault charges. At the Maryland police station, law enforcement collected a sample of King's DNA using a cheek swab, pursuant to the DNA Act. After lab testing and DNA database identification, the FBI processed King's DNA by entering it into its national database for unsolved crimes. The search identified a DNA sample found at the scene of an unresolved 2003 rape, which matched King's DNA sample. Following King's DNA match, the Maryland Circuit Court charged King with first-degree rape.

King moved to suppress the evidence showing the DNA match, arguing that the Act violated the Fourth Amendment and that law enforcement did not collect and process his DNA sample in accordance with the procedures specified by the DNA Act. Thus, King claimed, the charges against him for the 2003 rape were invalid.

At trial, the Maryland Circuit Court found the Act constitutional and convicted King of first-degree rape, sentencing him to life in prison. The Maryland Court of Appeals reversed and remanded the trial court's decision, deeming the search unreasonable and thus unconstitutional under the Fourth Amendment. Still, the court upheld the constitutionality of the DNA Act overall. It found, however, that portions of the Act authorizing DNA collection from felony arrestees were unconstitutional.

The United States Supreme Court granted certiorari to address the question of whether the government may collect DNA samples from individuals who have been arrested, but not yet convicted, without a warrant or consent. The Court evaluated the Fourth Amendment challenges under the reasonableness test. The reasonableness test requires an assessment, on

22. 133 S. Ct. 1958 (2013).

the one hand, of the degree to which a warrantless search intrudes upon an individual's privacy and, on the other, the degree to which it is needed for the promotion of legitimate government interests. In other words, for the search to be justifiable, the government interest must outweigh the degree to which the search invades an individual's legitimate expectations of privacy.

The Supreme Court argued that the degree of intrusion upon King's individual privacy when law enforcement collected a sample of his DNA was reasonable since King's arrest for assault lowered his privacy interest. Furthermore, the Supreme Court also considered to what degree a buccal swab was an intrusion into the human body. The Court held that a buccal swab applied to the inner tissue of a person's cheek in order to obtain a DNA sample does indeed constitute a search. However, the intrusion is negligible because it does not threaten the safety or health of the individual, nor does it "increase the indignity already attendant to normal incidents of arrest."

After assessing the degree to which the government needed King's DNA search for the promotion of its legitimate interests, the Court found that the government interest largely outweighed the degree to which King's DNA search invaded his legitimate expectations of privacy. According to the Court, DNA is just another metric of identification that involves gaining insight into a suspect's criminal history in order to determine what kind of threat he poses to facility staff, the existing detainee population, and the public. In fact, knowing the defendant's past criminal conduct may help in determining what kind of threat he poses to the public and may therefore affect a trial court's bail determination. The Court also explained that the government has a substantial interest in ensuring that persons accused of crimes are present at trial and not inclined to flee in order to avoid being caught for another more serious crime. Furthermore, identification of an arrestee for some heinous crime may free a person wrongfully imprisoned.

Finally, the Supreme Court evaluated whether the subsequent processing of King's DNA sample against the FBI's national database intruded on his privacy in a way that would make his DNA identification unconstitutional. The Court reasoned that it did not intrude on King's privacy since the DNA that was used for identification purposes only came from non-coding DNA sequences that do not reveal any information beyond identification.

The Court therefore reversed the Maryland Court of Appeal's decision and concluded that taking and analyzing an arrestee's DNA collected from a cheek swab incident to an arrest for a serious offense supported by probable cause is reasonable under the Fourth Amendment. The Court reasoned that such DNA identification is no more than an extension of other legitimate police booking procedures like fingerprinting and photographing.

Justice Scalia filed a dissenting opinion in which Justices Ginsburg, Sotomayor, and Kagan joined. According to the dissent, the DNA search conducted on King had nothing to do with establishing King's identity and was therefore not only in violation of the Fourth Amendment, but also in direct violation of the Act, which forbids DNA collection for any purpose other than identification.

Scalia argued that the Fourth Amendment forbids searching for evidence of a crime absent any basis for believing a person is guilty of the crime. According to Scalia, the primary purpose of the DNA search conducted on King was to detect evidence that he had committed crimes unrelated to the crime of his arrest and was therefore unconstitutional. Furthermore, Scalia argued that King's DNA was not collected and processed in accordance with the procedures specified by the DNA Act. Under the DNA Act, only identity information may be added to the database after an individual is arraigned. According to Scalia, if one wanted to identify someone in custody using his DNA, it would be more logical to compare that DNA against known offenders than to compare it against the collection of evidence from unsolved crimes, whose perpetrators are by definition unknown.

VI. RIGHT OF PUBLICITY DEVELOPMENTS

A. *IN RE NCAA STUDENT-ATHLETE NAME & LIKENESS LICENSING LITIGATION*²³

In *In re NCAA Student-Athlete Name & Likeness Licensing Litigation*, the United States Court of Appeals for the Ninth Circuit affirmed the district court's denial of a video game developer's motion to strike, which challenged a former college football player's right of publicity claims as a strategic lawsuit against public participation ("SLAPP"). In its anti-SLAPP motion, the developer raised a number of defenses, each grounded in the First Amendment. However, the Ninth Circuit, focusing on the "transformative use" test, ultimately held that the developer had no First Amendment defense against the football player's right of publicity claims for the use of his likeness in a video game that approximated the very setting in which he had achieved renown.

Electronic Arts, Inc. ("EA"), the developer, produced the video game series *NCAA Football*, in which players could control avatars of college football players to participate in simulated games. Each avatar corresponded to a real-life player, with the player's actual jersey number and virtually

23. 724 F.3d 1268 (9th Cir. 2013).

identical height, weight, build, skin tone, hair color, and home state. However, the game differed slightly from reality by omitting the players' names from their jerseys and by assigning each avatar a hometown that is different from the actual player's hometown. Samuel Keller, the plaintiff and one of the many players represented in the game, filed a putative class-action complaint in the United States District Court for the Northern District of California, alleging that EA violated his rights of publicity under California Civil Code § 3344 and California common law. In response, EA filed a motion to strike the complaint under California's anti-SLAPP statute, California Civil Procedure Code section 425.16.

To meet the requirements of Section 425.16, a defendant must make a *prima facie* showing that the plaintiff's suit arises from an act by the defendant made in connection with a public issue in furtherance of the defendant's right to free speech under the United States or California Constitution. If there is such a *prima facie* showing, a court must then evaluate whether the plaintiff has established a reasonable probability that the plaintiff will prevail on his claim. In its motion, EA raised four affirmative defenses derived from the First Amendment: (1) protection of speech under the "transformative use" test, (2) protection of speech under the *Rogers* test, (3) the "public interest" exemption to the right of publicity, and (4) the "public affairs" exemption to the right of publicity. EA argued that in light of these defenses, it is not reasonably probable that Keller would prevail on his right of publicity claim. The district court denied EA's motion, holding that EA (1) had no First Amendment defense against Keller's right of publicity claims, and (2) that no other defense asserted by EA defeated Keller's claims. EA appealed, and the Ninth Circuit analyzed each of EA's asserted defenses.

First, regarding the "transformative use" test, the court pointed to five factors in *Comedy III Productions, Inc. v. Gary Saderup, Inc.*, 21 P.3d 797 (Cal. 2001), used to determine whether a work is sufficiently transformative to obtain First Amendment protection:

1. Whether the celebrity likeness is one of the "raw materials" from which an original work is synthesized, or whether the depiction or imitation of the celebrity is the very sum and substance of the work in question;
2. Whether the work is primarily the defendant's own expression, as long as that expression is something other than the likeness of the celebrity;
3. Whether the literal and imitative or the creative elements predominate in the work;

4. Whether the marketability and economic value of the challenged work derive primarily from the fame of the celebrity depicted; and
5. Whether an artist's skill and talent is manifestly subordinated to the overall goal of creating a conventional portrait of a celebrity so as to commercially exploit his or her fame.

After reviewing case law from within the Ninth Circuit and California state courts, the court found that EA's use of Keller's likeness did not contain significant transformative elements such as would entitle EA to the defense as a matter of law. The court found that the facts at hand were very similar to those in *No Doubt v. Activision Publishing, Inc.*, 122 Cal. Rptr. 3d 397 (Ct. App. 2011). It reasoned that here, as in the video game in dispute in *No Doubt*, users manipulated the avatars in the performance of the same activity for which they are known in real life—in this case, the avatars played football, and in *No Doubt*, the avatars performed in a rock band. The context in which the activity occurs is similarly realistic—*No Doubt* placed avatars in real concert venues, and in *NCAA Football*, settings included realistic depictions of actual college football stadiums. Finally, because the avatar in *NCAA Football* replicated Keller's physical characteristics and depicted exactly what he did as a celebrity, it did not transform the public figure into a “fanciful, creative character” or portray him as an “entirely new character.”

The Ninth Circuit also discussed a very similar case, *Hart v. Electronic Arts, Inc.*, 717 F.3d 141 (3d Cir. 2013), where EA faced a materially identical challenge by a former college football player under New Jersey's right of publicity law. There, the Third Circuit noted the striking similarity between right of publicity laws in both states and applied the “transformative use” test. The Third Circuit held that *NCAA Football* did not sufficiently transform Hart's identity to escape the right of publicity claim; thus, the court reversed the district court's grant of summary judgment to EA. In reaching the same conclusion as the Third Circuit did, the Ninth Circuit agreed that in *NCAA Football*, (1) the lack of transformative context is even more pronounced than in *No Doubt*, and (2) the appeal of the game lies in users' ability to play as, or alongside, their preferred players or team.

Second, the court refused to import the *Rogers* test for false endorsement claims under the Lanham Act into a right of publicity context wholesale. In *Rogers v. Grimaldi*, 875 F.2d 994 (2d Cir. 1989), the Second Circuit balanced First Amendment rights against claims under the Lanham Act, holding that the Lanham Act should apply to artistic works only where the public interest in avoiding consumer confusion outweighs the public interest in free expression. The Ninth Circuit reasoned that the *Rogers* test was designed to protect consumers from the risk of consumer confusion, while the right of publicity seeks to protect intellectual property. The Ninth Circuit also

pointed to *Brown v. Electronic Arts, Inc.*, 724 F.3d 1235 (9th Cir. 2013), a similar case decided on the same day by the same panel, but which was based on Lanham Act claims. There, the court held that under the *Rogers* test, since Brown's likeness is artistically relevant to the video games and there are no facts supporting the claim that EA misled consumers as to Brown's involvement with the games, the public interest in free expression outweighed the public interest in avoiding consumer confusion. Here, Keller's publicity claim was not founded on alleged consumer confusion, but rather on the allegation that EA had misappropriated his talent and years of hard work on the football field. The reasoning underlying the *Rogers* test—that artistic and literary works should be protected unless they explicitly mislead consumers—was simply not applicable to Keller's asserted interests.

The court also found the third and fourth defenses inapplicable. The two defenses protect the reporting of factual information under state law. The “public interest” exemption only applies to common law right of publicity claims, while the “public affairs” exemption only applies to statutory right of publicity claims. The court reasoned that both defenses are intended to protect the publishing or reporting of factual data. However, *NCAA Football* is not a means for obtaining information about real-world football games, and therefore it is not publishing or reporting factual data, which otherwise could be protected under these two defenses. By denying EA's four possible defenses, the Ninth Circuit therefore affirmed the district court's decision to deny EA's motion to strike.

In Judge Thomas's dissent, he argued for examining the transformative and creative elements in the video game as a whole, rather than the majority's analysis of how a single athlete's likeness is represented in the video game. He determined that the creative and transformative elements of *NCAA Football* dominate the commercial use of the likenesses of the athletes within the games. Moreover, he found that with thousands of virtual football players in *NCAA Football*, there is no evidence that the market power of the video game came from the likeness of Keller as opposed to the creativity of the video game itself.

VII. ANTITRUST DEVELOPMENTS

A. *UNITED STATES V. APPLE INC.*²⁴

In *United States v. Apple Inc.*, a United States District Court for the Southern District of New York held that Apple, in violation of the Sherman

24. 952 F. Supp. 2d 638 (S.D.N.Y. 2013).

Act, conspired to raise the price of electronic books (“e-books”) through various horizontal price-fixing activities performed in connection with Apple’s 2010 release of the iPad.

The United States Department of Justice and thirty-three states and U.S. territories (collectively, “the DOJ”), filed an antitrust suit in 2012 alleging that Apple and five major book publishing companies conspired to raise, fix, and stabilize prices of e-books in violation of Section 1 of the Sherman Antitrust Act, which delineates and prohibits specific means of anticompetitive conduct. The five publishing companies were Hachette Book Group, Inc., HarperCollins Publishers, Macmillan, Penguin Group, Inc., and Simon & Schuster, Inc. (collectively, “Publishers”). The Publishers settled their claims, but Apple proceeded to trial.

When Apple released its iPad, Amazon and its Kindle e-reader led the e-book market. At the time, Amazon had agreements with publishers to follow a “wholesale model” of pricing, wherein the publishers would sell books to retailers like Amazon at a wholesale price, which was often a percentage of their suggested retail price. The retailers, not the publishers, had the power to sell the e-books at any price they chose. Amazon decided to price newly released and bestselling e-books at \$9.99 each, which roughly matched the wholesale price. This led to discontent among the Publishers, as they feared the low price point would have detrimental effects on both their short-term and long-term business models. In the short term, they feared that the low price point would harm sales of their more profitable hardcover books at brick-and-mortar stores, often priced at thirty dollars or more. In the long-term, the Publishers feared that consumers would grow accustomed to \$9.99 as the price for all books.

When Apple launched the iPad with e-reader capabilities on iBookstore, it sought to make a change. Apple and the Publishers worked together to replace the wholesale model with the “agency model.” The agency model allowed the Publishers to retain the authority to set prices themselves, and a thirty percent commission ensured that Apple would make a profit from every e-book sale without having to compete on price. However, Apple worried that if the Publishers raised e-book prices, which they would when given the opportunity, consumers would not want to buy e-books at \$14.99 from the iBookstore when they could get them from Amazon for \$9.99. Thus, Apple sought to have all other retailers, including Amazon, under the agency model. In its contracts with the Publishers, Apple included a most-favored-nations (“MFN”) clause, which required publishers to ensure that the prices for new releases in the iBookstore matched any lower retail price offered by any other retailer. Therefore, the Publishers felt pressure to switch all retailers, including Amazon and Google, to the agency model to retain

control over prices. Both Apple and the Publishers knew that, as a result of their actions, e-book prices would rise across the board. In fact, prices did in fact go up in April 2010.

The DOJ presented extensive direct and circumstantial evidence that Apple orchestrated the horizontal price-fixing conspiracy between the publishers, leading the court to hold that the DOJ proved a per se violation of the Sherman Act.

